21 October 2026

Positive preliminary assessment of the satisfactory fulfilment of milestones and targets related to the fourth payment request submitted by Germany on 25 September 2026, transmitted to the Economic and Financial Committee by the European Commission

Executive summary

In accordance with Article 24(2) of Regulation (EU) 2021/241, on 25 September 2026, Germany submitted a request for payment for the fifth instalment of the non-repayable support. The payment request was accompanied by the required management declaration and summary of audits.

To support its payment request, Germany provided due justification of the satisfactory fulfilment of the 27 milestones and targets of the fifth instalment of the non-repayable support of the Council Implementing Decision of 13 July 2021 on the approval of the assessment of the recovery and resilience plan for Germany[1].

For 11 targets covering a large number of beneficiaries, in addition to the summary documents and official listings provided by Germany, the Commission services have assessed a statistically significant sample of individual files. The sample size has been for the most part set at 60 with one additional unit for target 69 and two additional units for target 130, in order to ensure that all relevant categories required by the Council Implementing Decision could be covered, which corresponds to a confidence level of 95% or above in all cases.

In its payment request, Germany has confirmed that measures related to previously satisfactorily fulfilled milestones and targets have not been reversed. The Commission does not have evidence of the contrary. Upon receipt of the payment request, the Commission has assessed on a preliminary basis the satisfactory fulfilment of the relevant milestones and targets. Based on the information provided by Germany the Commission has made a positive preliminary assessment of the satisfactory fulfilment of all 27 milestones and targets.

The milestones and targets positively assessed as part of this payment request demonstrate significant steps in the implementation of Germany's Recovery and Resilience Plan. They notably highlight the continuation of the reform momentum in key policy areas. This includes, among others, milestones and targets related to the green and digital transitions. It covers reforms supporting institutionalisation of digital education, the expansion of the use of the European identity ecosystem in Germany and the integration of data policy in the German federal administration. The milestones and targets also confirm progress towards the completion of investment projects related to IPCEI hydrogen, the improvement of the digital maturity of hospitals, energy-efficient renovations in houses, the rollout of zero-emission commercial vehicles and the building of e-vehicle charging stations.

By the transmission of this positive preliminary assessment and in accordance with Article 24(4) of Regulation (EU) 2021/241, the Commission asks for the opinion of the Economic and Financial Committee on the satisfactory fulfilment of the relevant milestones and targets.

[1] ST 10158/21 and 10158/21 ADD 1, as amended by ST 5536/23 INIT; ST 15572/23 INIT; ST 11674/24 INIT, ST 11674/24 COR 1, ST 11674/24 COR 2(sk), and ST 11674/24 ADD1; ST 10517/25 INIT and ST 10517/25 ADD 1; ST 17026/25 INIT and ST 17026/25 ADD 1; ST 10632/26 INIT and ST 10632/26 ADD 1.

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Number and name of the Target: 5 Commitment of EUR 1 411 722 000

Related Measure: 1.1.1 Hydrogen projects within the framework of IPCEIs

Quantitative Indicator: EUR million

Baseline: 0

Target: 1 411

Time: Q2 2026

1. Context:

The objective of the hydrogen Important Projects of Common European Interest (IPCEIs) is to accelerate the market uptake of hydrogen and its derivatives to decarbonise emission-intensive processes and develop new areas of application in Germany and in Europe. This measure consists of financial support for hydrogen projects.

Target 5 consists in the commitment of at least EUR 1 411 722 000 to hydrogen projects in line with grant decisions issued.

Target 5 is the fourth target of the investment, and it follows the completion of milestone 1, milestone 2 and target 3, related to the completion of expression of interest procedure, the issuance of first grant decisions, and the commitment of at least EUR 500 000 000, respectively. It is accompanied by target 6, related to the installation and connection to the electricity grid of at least 200 MW of electrolysis capacity.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Spreadsheet overview of funds committed	Lists of amounts committed per project (Table 1) and per contractual counterpart (Table 2). The IPCEI projects are co-financed by the German federal government and by the federal states concerned. The federal government share of the total funding is generally 70%, with the federal state (Land) involved contributing 30% of the total grant. The federal government share of the grant amount is to be entirely financed via the RRF (*DARP*) funds, and so these are listed as separate amounts (see column “Thereof DARP amount”).
3	Copies of 14 grant decisions issued	14 grant decisions were issued to ten recipients between 17 April 2023 and 4 July 2024.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

At least EUR 1 411 722 000 have been committed to hydrogen projects in line with grant decisions issued. In line with the description of the measure, this measure consists of **financial support for hydrogen projects.**

Germany has provided an overview table detailing funds committed per project and co-financers (Evidence No. 2). The Federal Government and a federal state (Land) act as co-financiers for every project. As detailed in the grant decisions, the Federal Government is to pay 70% of committed funds, and the federal state 30%. (Evidence No. 3).

Commission services verified that the committed funds indicated in the spreadsheet match the indications on funding from the issued grant decisions (Evidence No. 2 and Evidence No. 3), identifying each project by the funding code. Overall, EUR 1 971 115 945.50 financed by the Federal Government with funds from the German recovery and resilience plan (representing 70% of overall funds committed) have been committed to 11 projects, split into 14 grant decisions.

Funds have been committed to hydrogen projects, related primarily to producing innovative electrolysers (acronym "Sunfire1500" (in two locations)), enabling renewable hydrogen production through constructing electrolysers (acronyms "GreenMotionSteel", "GET_H2_Nukleus", "DE43-H2SBremen", "DE43-H2S-Emden", "HydroHub_Fenne"), building a hydrogen grid (acronym "mosaHYc"), building hydrogen storage capacity (acronym "DE43-H2S-Huntorf"), developing industrial hydrogen applications (acronyms "SALCOS-Stufe-1", "BoschPowerUnits" (in three locations)) and industrialising a heavy-duty hydrogen transport application (acronym "NextGen_HD_Stack") (Evidence No. 3, section V07). Funds were committed in the period between 17 April 2023 and 4 July 2024 (Evidence No. 3, see also the table overview of the preliminary assessment on milestone 2).

According to the evidence provided, Germany committed EUR 1 971 115 945.50 to hydrogen projects in line with grant decisions issued (Evidence No. 2 and Evidence No. 3). As part of the second payment request, Germany already submitted evidence to support the commitment of EUR 1 971 115 945.50, under target 3 of the same investment, exceeding the requirement for target 3 of committing EUR 500 000 000 (which is the baseline for target 5) by EUR 1 471 115 945.50. While these additional units were not necessary for assessing the satisfactory fulfilment of target 3, their inclusion in the assessment of the satisfactory fulfilment of the sequential target 5 is warranted, given the link between target 3 and the subsequent target 5. Notably, the cumulative amount of grants committed under investment 1.1.1 so far is EUR 1 971 115 945.50.

The Commission considers that there is a clerical error in the text of the Council Implementing Decision as regards the baseline of target 5 and has undertaken the assessment on a revised basis. In such description, it is stated that the baseline for the target's quantitative indicator is EUR 0. However, the original German Recovery and Resilience Plan (Evidence 4) states the total amount to be committed under investment 1.1.1 to be EUR 1 500 000 000, thereby indicating that the EUR 500 000 000 committed under target 3 constitutes an intermediary target and, accordingly, the baseline for target 5. This latter figure is the one considered relevant for the assessment of target 5. Against this background, the justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 6 Electrolysis capacity

Related Measure: 1.1.1 Hydrogen projects within the framework of IPCEIs

Quantitative Indicator: Megawatt

Baseline: 0

Target: 200

Time: Q2 2026

1. Context:

The objective of the hydrogen Important Projects of Common European Interest (IPCEIs) is to accelerate the market uptake of hydrogen and its derivatives to decarbonise emission-intensive processes and develop new areas of application in Germany and in Europe. This measure consists of financial support for hydrogen projects.

Target 6 concerns the installation and connection to the electricity grid of at least 200 MW of electrolysis capacity.

Target 6 is the fifth and last target of the investment, and it follows the completion of milestone 1, milestone 2, target 3 and target 5, related to the completion of expression of interest procedure, the issuance of first grant decisions, the commitment of at least EUR 500 000 000, and the commitment of EUR 1 411 722 000, respectively.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Copy of a contract issued on 15 November 2021	This document shows a contract signed between RWE Generation SE and Linde GmbH on 15 November 2021. The contract (Order No. 4300362261) subject concerns the planning and turnkey construction of two electrolysers, each of 100 MW capacity, including ancillary facilities for two hydrogen project plants (line 1 and line 2) in the context of the Nukleus project.
3	Commissioning protocol line 1	This document shows a commissioning protocol issued by the grid operator Westnetz GmbH and signed on 6 August 2025 by Westnetz GmbH and the plant operator RWE Technology International GmbH. The commissioning protocol confirms the installation of a handover station (line 1) and the connection to a high-voltage grid.
4	Commissioning protocol line 2	This document shows a commissioning protocol issued by the grid operator Westnetz GmbH and signed on 19 February 2026 by Westnetz GmbH and the plant operator RWE Technology International GmbH. The commissioning protocol confirms the installation of another handover station (line 2) and the connection to a high-voltage grid.

3. Analysis:

The justification and substantiating evidence provided by the Germany authorities cover all constitutive elements of the target.

At least 200 MW of electrolysis capacity shall be installed and connected to the electricity grid.

A contract was signed on 15 November 2021 between RWE Generation SE and Linde GmbH, Linde Engineering (Evidence No. 2), under Order No. 4300362261, for the planning and turnkey construction of two electrolysers each with 100 MW capacity, including ancillary facilities for two hydrogen production plants (line 1 and line 2), at Schüttorfer Straße 100, 49808 Lingen, under the Nukleus project. The total contracted electrolysis capacity amounts to 200 MW (Evidence No. 2).

The first electrolyser line (PTG Nukleus 1) was subsequently installed and connected to the high-voltage electricity grid, as confirmed by a commissioning protocol (*Inbetriebsetzungsprotokoll für Übergabestationen*) for the high-voltage handover station issued in accordance with VDE-AR-N 4120 standards, signed on 6 August 2025 by RWE Technology International GmbH as plant operator and by Westnetz GmbH as grid operator (Evidence No. 3). RWE Technology International GmbH acts as the operational subsidiary of RWE Generation SE, the contracting party under Evidence No. 2, and is responsible for operating the hydrogen production facilities at the Lingen site on behalf of RWE Generation SE. The station is located at Schüttorfer Straße 100, 49808 Lingen, the same address as the installation site specified in the contract (Evidence No. 2), confirming that this commissioning relates directly to Line 1 of the Nukleus project.

The second electrolyser line (PTG Nukleus 2) was likewise installed and connected to the high-voltage electricity grid, as confirmed by a commissioning protocol for the high-voltage handover station issued in accordance with VDE-AR-N 4120, signed on 19 February 2026 by RWE Technology International GmbH as plant operator and by Westnetz GmbH as grid operator (Evidence No. 4). As with Line 1, the station is located at Schüttorfer Straße 100, 49808 Lingen, confirming that this commissioning relates directly to Line 2 of the Nukleus project.

Taken together, the two electrolyser lines — each of 100 MW capacity as established by the contract (Evidence No. 2), and each confirmed as installed and connected to the high-voltage electricity grid by the corresponding commissioning protocols signed by both the plant operator and the grid operator (Evidence No. 3-4) — result in a total installed and grid-connected electrolysis capacity of 200 MW at the Lingen site.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 9 Disbursement to the supported projects

Related Measure: 1.1.2 Funding programme for decarbonisation in industry

Quantitative Indicator: EUR million

Baseline: 0

Target: 55

Time: Q2 2026

1. Context:

The objective of the measure is to help industry shift from highly emission-intensive production processes to low GHG processes. The measure consists of support for research and development, testing in experimental or pilot plants, and investments in installations covered by the EU ETS.

Target 9 concerns the disbursement to recipients of at least EUR 55 000 000 of funds.

Target 9 is the third and last target of the investment, and it follows the completion of milestone 7 and target 8, related to the entry into force of funding guideline and the issuance of grant decisions, respectively.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Overview Spreadsheet	This spreadsheet lists 100 individual disbursements amounting to EUR 55 512 471 made under the Decarbonisation of Industry funding programme between 2021 and June 2026. Each row records one payment: the funding reference (FKZ), grant recipient, project title, budget year, booking number in the federal budget-monitoring list, the amount paid, the booking date, and the date the payment request was received. For each project the first row also shows the cumulative total paid per funding reference broken down by year.
3	Sample of 60 units	On the basis of a sample, the Commission services have reviewed for each amount disbursed: i) Grant decisions (*Zuwendungsbescheide)* along with their subsequent amendments (*Änderungsbescheide*) and a final settlement decision (*Schlussbescheid*). They are issued by the Federal Ministry for Economic Affairs and Climate Action (BMWK, later renamed the Ministry for Economic Affairs and Energy, BMWE). The ministry acts as the granting authority (*Zuwendungsgeber*), while day-to-day administration is delegated to a project executing agency (*Projektträger*) — in this case the Competence Centre for Climate Action in Energy-Intensive Industries (hereinafter referred to as "KEI"). ii) Proofs of payment each containing a payment request

		(*Zahlungsanforderung*) in which the grant recipient draws down an instalment of its federal grant, and the payment documentation (*Zahlungsdokumentation*) showing the government's internal record of executing that request with the budget line charged, the recipient's bank details, and the officials who reviewed and approved the transfer before the federal cash office released the money.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

At least EUR 55 000 000 of funds have been disbursed to the recipients.

The German authorities submitted a spreadsheet (Evidence No. 2) listing 100 individual grant disbursements made between 2021 and June 2026 to 15 individual recipients across 19 funding references, amounting in total to EUR 55 512 471. The projects were approved under the Federal Funding Guideline to support Decarbonisation in Industry (*Förderrichtlinie zur Dekarbonisierung in der Industrie*), published on 15 January 2021 in the Federal Gazette *(Bundesanzeige*r), which entered into force on 1 January 2021 (see Preliminary Assessment Fiche for target 8, assessed under the third payment request).

Following the selection of a random sample of 60 units (Evidence No. 3), Germany submitted grant decisions (Evidence No. 3, i)) issued by the Federal Ministry for Economic Affairs and Climate Action (BMWK, later renamed the Ministry for Economic Affairs and Energy, BMWE) between 2021 and July 2024, and proofs of payment (Evidence No. 3, ii) issued by the federal grant management system 'PROFI' between November 2021 and June 2026 to prove the disbursement of funds. The evidence provided for a sample of 60 units confirmed that the requirements of the target have been met. The proofs of payment (Evidence No. 3) contain two documents in one: first, the payment request (*Zahlungsanforderung*)*,* by which the grant recipient draws down an instalment of its federal grant; and second – annexed to the payment request – the payment documentation (Evidence No. 3, ii)), which is automatically generated in the booking system 'PROFI' once the Federal Treasury (*Bundeskasse*) – as the authority executing the payment – has released the payment. For each grant decision and proof of payment, the Commission services verified that the date of issuance was no earlier than February 2020 and no later than August 2026; that the name of the recipient and the corresponding unique identifier matched those listed in the spreadsheet (Evidence No. 2); that the reference to the relevant funding guidelines was present; and that the amounts on the proofs of payment corresponded to those listed in the spreadsheet (Evidence No. 2). Altogether, a disbursement to the recipients of EUR 55 512 471 has been confirmed, thereby exceeding the target of EUR 55 000 000 by EUR 512 471 (Evidence No. 2-3).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 16 Availability of climate research project reports

Related Measure: 1.1.4 Project-related climate protection research

Quantitative Indicator: Number

Baseline: 0

Target: 45

Time: Q4 2025

1. Context:

The objective of the measure is to contribute to decarbonising the economy considering 2050 targets with a focus on SMEs and basic industries. This measure consists of support to research projects in the areas of climate change mitigation, energy efficiency and climate resilience.

Target 16 requires that final reports describing the results of 45 collaborative projects have been made available to the project promoters.

Target 16 is the second and last target of the investment. It follows the completion of target 14, related to the approval for funding of 45 climate-related research projects selected under the call for tender.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Copy of the call for proposals "KlimPro-Industrie"	A copy of the call for proposals for the funding of research and development for the avoidance of process-related emissions (*Richtlinie zur Förderung von Projekten zum Thema „Vermeidung von klimarelevanten Prozessemissionen in der Industrie (KlimPro-Industrie)"*), published 26 July 2019 in the Federal Gazette (*Bundesanzeiger, BAnz AT 26.07.2019*). Section 7 of this call for proposals identifies Deutsches Zentrum für Luft- und Raumfahrt (DLR) as the project promoter for the projects under this proposal.
3	Copy of the call for proposals "KMU-innovativ"	A copy of the call for proposals for the funding of research and development by SMEs (*Richtlinie zur Förderung von Projekten zum Thema „KMU-innovativ: Ressourceneffizienz und Klimaschutz"*), published 20 August 2019 in the Federal Gazette (*Bundesanzeiger, BAnz AT 20.08.2019*). Section 7 of this call for proposals identifies Deutsches Zentrum für Luft- und Raumfahrt (DLR), Projektträger Jülich (PTJ), and Project Management Agency Karlsruhe (PTKA) as the project promoters. The project promoter is determined by the thematic priority of the project. PTKA is responsible for projects in the field of sustainable water management;

		however, no projects falling under this topic were submitted under this target. Therefore, DLR and PTJ are the only project promoters relevant for the projects assessed under this target.
4	Copy of the call for proposals "Future Cities"	A copy of the call for proposals for the funding of projects working on "future cities" (*Richtlinien zur Förderung von Vorhaben für die Umsetzung der Leitinitiative Zukunftsstadt*), published in the Federal Gazette on 1 April 2016 (*Bundesanzeiger, BAnz AT 01.04.2016*). Section 8 of this call for proposals identifies Deutsches Zentrum für Luft- und Raumfahrt (DLR) as the project promoter for the projects under this proposal.
5	Copy of the call for proposals "CO2-WIN"	A copy of the call for proposals for the funding of researching and developing carbon dioxide as sustainable source of carbon (*Richtlinie zur Förderung von Forschungs- und Entwicklungsvorhaben zum Thema „CO2 als nachhaltige Kohlenstoffquelle – Wege zur 15 industriellen Nutzung (CO2-WIN)*" im Rahmenprogramm „Forschung für Nachhaltige Entwicklung – FONA"), published in the Federal Gazette on 3 August 2018 (*Bundesanzeiger, BAnz AT 03.08.2018*). Section 7 of this call for proposals identifies Projektträger Jülich (PTJ) as the project promoter for the projects under this proposal.
6	Copy of the call for proposals "r4"	A copy of the call for proposals for the funding of research improving resource efficiency (*Richtlinien zur Fördermaßnahme „r4 – Innovative Technologien für Ressourceneffizienz – Forschung zur Bereitstellung wirtschaftsstrategischer Rohstoffe"*), published on 23 July 2013 (*Bundesanzeiger, BAnz AT 23.07.2013*). Section 7 of this call for proposals identifies Projektträger Jülich (PTJ) as the project promoter for the projects under this proposal.
7	German Federal "Funding Catalogue" (*Förderkatalog*)	The German Federal "Funding Catalogue" (*Förderkatalog*) provides information on projects funded by the German federal government. When entering a project's funding reference number (*Förderkennzeichen*) into the database, an information page for that project is displayed, including the relevant funding guideline indicated in the "Thema des geförderten Vorhabens" column, available at: https://foerderportal.bund.de/foekat/jsp/StartAction.do?actionMode=list
8	Information Sheet for Applicants/Grant Beneficiaries on Cooperation between Partners in Collaborative Projects (*Merkblatt für Antragsteller/Zuwendungsempfänger zur Zusammenarbeit der Partner von Verbundprojekten*)	The information sheet for applicants and grant beneficiaries on cooperation between partners in collaborative projects (*Merkblatt für Antragsteller/Zuwendungsempfänger zur Zusammenarbeit der Partner von Verbundprojekten*) governs the collaboration among grant recipients. It contains the definition of the term "collaborative project" (*Verbundprojekt*).
9-51	Final reports (*Schlussberichte*)	43 final reports (*Schlussberichte*) written by the grant beneficiaries describing the results of 43 collaborative

		projects.
52	Acknowledgement of receipt from Deutsches Zentrum für Luft- und Raumfahrt (hereinafter, 'DLR')	Email dated 2 June 2026 from the German Aerospace Centre (*Deutsche Zentrum für Luft- und Raumfahrt* or DLR) confirming receipt of the final reports drafted by the grant beneficiaries listed in the annex attached to the email.
53	Acknowledgment of receipt from Projektträger Jülich (hereinafter, 'PTJ')	Email dated 2 June 2026 from Projektträger Jülich (PTJ) confirming receipt of the final reports drafted by the grant beneficiaries listed in the annex attached to the email.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

Final reports describing the results (...)

Germany has provided 43 final reports (*Schlussberichte*) covering 43 projects (Evidence No. 9-51). 24 reports follow a three-part structure comprising a brief report (*Kurzbericht* or *Kurze Darstellung*), a factual report (*Sachbericht* or *Eingehende Darstellung*), and a success control report (*Erfolgskontrollbericht*). The remaining 19 reports consist of a unified final report. Regardless of their structure, all reports contain a detailed description of the project results. These results all relate to three areas: climate change mitigation, energy efficiency and climate resilience. They include scientific and technical findings, experimental and measurement results, testing results, material and process developments, methods and models, software or data-related developments, and prototypes or demonstrators.

(…) of 45 collaborative projects

31 final reports consist of one joint final report covering the contributions of all participating partners. The remaining 12 final reports consist of separate reports by individual partners, each describing the relevant partner's contribution to the collaborative project.

The information sheet for applicants and grant beneficiaries on cooperation between partners in collaborative projects (*Merkblatt für Antragsteller/Zuwendungsempfänger zur Zusammenarbeit der Partner von Verbundprojekten*) (Evidence No. 8) defines collaborative projects (*Verbundprojekte*) as projects in which at least two collaborative partners cooperate on a project-specific basis. The substantive content of all 43 reports shows that, in each case, at least two collaborative partners cooperated towards common project objectives with different contributions to the collaborative project. In 25 reports, this collaborative dimension is additionally demonstrated through a dedicated section explaining the roles and contributions of each participating partner or through formal report elements, including tables of contents, reflecting the division of tasks among project partners. On this basis, the requirement that the projects be collaborative is satisfactorily fulfilled.

The Council Implementing Decision required that final reports describing the results of 45 collaborative projects be made available to the project promoters. Germany submitted evidence concerning final reports describing the results of 43 collaborative projects. Whilst this constitutes a minimal numerical deviation of 4.44% from the requirement of the Council Implementing Decision, the overall objective of this target is considered met notwithstanding this minor deviation. On this basis, it is considered that this constitutive element of the target is satisfactorily fulfilled.

(…) have been made available to the project promoters.

40 final reports reference their respective calls for proposals which identify *Deutsches Zentrum für Luft- und Raumfahrt* (DLR) and *Projektträger Jülich* (PTJ) as the relevant project promoters (Evidence No. 2-6). The German Federal database "Funding Catalogue" (*Förderkatalog*) (Evidence No. 7) identifies the respective project promoter for the remaining three final reports (Evidence No. 28, 36, and 37). One call for proposals (Evidence No. 3) designates Project Management Agency Karlsruhe (PTKA) as a third project promoter, specifically for projects falling under the thematic area "Sustainable Water Management". Since none of the 43 projects assessed under this target were submitted under that thematic area, PTKA bears no responsibility for any project within the scope of this target and is therefore excluded from the assessment.

Germany has provided one email from each of the two relevant project promoters, in which DLR confirms having received 39 final reports and PTJ confirms having received 4 final reports from the grant beneficiaries, as listed in the annexes attached to the respective emails (Evidence No. 52 and 53). The lists in the email annexes correspond to all final reports submitted to the Commission (Evidence No. 9-51). Taken together, the emails and their annexes demonstrate that the final reports have been made available to the project promoters.

Furthermore, in line with the description of the measure, the projects supported shall be research projects in the areas of climate change mitigation, energy efficiency and climate resilience.

All projects are research projects in one or more of the areas of climate change mitigation, energy efficiency, and climate resilience. Each of these three thematic areas is covered by at least one project (Evidence No. 9-51): 19 projects are in the area of climate change mitigation, four projects are in the area of energy efficiency, 10 projects are in the area of climate resilience, and another 10 projects are both in areas of climate change mitigation and energy efficiency.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 19 Availability of hydrogen research project reports

Related Measure: 1.1.5 Flagship projects for research and innovation in the context of the National Hydrogen Strategy

Quantitative Indicator: Number

Baseline: 0

Target: 150

Time: Q2 2026

1. Context:

The objective of the measure is to contribute to decarbonising the economy and specifically to addressing key issues related to the provision of green hydrogen in the future energy system. This measure consists of support for flagship projects for hydrogen research and innovation.

Target 19 requires that final reports describing the results of 150 projects have been made available to the project promoter.

Target 19 is the third and last target of the investment. It follows the completion of milestone 17, related to the publication of the competition, including the eligibility conditions, on the homepage of the Federal Ministry of Education and Research and its opening for applications; target 18, related to the issuance of grant decisions to recipients/applicants, enabling the start of the implementation of the selected projects; and target 21, related to the commitment of at least EUR 665 000 000 of the EUR 700 000 000 allocated to the flagship projects.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Spreadsheet containing a list of 191 projects	Spreadsheet listing 191 projects and including the funding code, start and end dates and grant recipient for each project.
3	Copy of the call for the "Hydrogen Republic Germany" ideas competition (*Ideenwettbewerb „Wasserstoffrepublik Deutschland"*)	This competition is an initiative of the Federal Ministry of Education and Research to implement the Federal Government's National Hydrogen Strategy. It aims to provide funding for green hydrogen flagship projects, as well as basic research on green hydrogen, and identifies Projektträger Jülich as the project promoter.
4	Copy of the German Federal Minister of Education and Research's approval to initiate the application process for the three hydrogen flagship projects	Dated 17 December 2020 and electronically approved by the Federal Minister of Education and Research on 29 December 2020, this document identifies H2Giga, OffsH2ore (subsequently renamed H2Mare – see Evidence No. 6) and TransHyDE as the three hydrogen flagship projects arising from the ideas competition "Hydrogen Republic Germany".

5	Letters from Projektträger Julich ("PTJ")	Three letters issued by PTJ on 4 January 2021, each addressed to the coordinator of one of the three hydrogen flagship projects H2Giga, OffsH2ore (subsequently renamed H2Mare, see Evidence No. 6) and TransHyDE. Acting on behalf of the Federal Ministry of Education and Research, PTJ informs the recipients that the respective project sketches were recommended for funding subject to conditions and invites them to submit the corresponding funding applications to PTJ. The letters also set out the applicable deadlines, project-specific requirements and recommendations, and identify the relevant PTJ contact persons.
6	Email correspondence concerning the renaming of project "OffsH2ore" to "H2Mare"	Email correspondence dated 5 January 2021 between the Federal Ministry of Education and Research (BMBF) and Projektträger Jülich (PTJ) documenting the decision to rename the project "OffsH2ore" as "H2Mare". The correspondence explains that the name "OffsH2ore" was already being used for another project and could therefore not be retained. Following consideration of alternative names, BMBF approved the use of "H2Mare".
7	Final reports (*Schlussberichte*)	60 final reports (*Schlussberichte*) written by the grant beneficiaries, describing the results of 60 projects.
8	Acknowledgment of receipt from Projektträger Julich ("PTJ")	Email dated 8 June 2026 from PTJ confirming receipt of the final reports for 343 projects, including all 191 projects from the spreadsheet provided by Germany (Evidence No. 2), drafted by the grant beneficiaries listed in the annex attached to the email.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

Final reports describing the results of 150 projects (...)

The German authorities provided a spreadsheet listing 191 projects (Evidence No. 2). Following the selection of a random sample of 60 units, Germany submitted one final report (*Schlussbericht*) for each sampled project (Evidence No. 7).

The final reports follow a three-part structure comprising a brief report (*Kurzbericht*), a factual report (*Sachbericht* or *Eingehende Darstellung*), and a success control report (*Erfolgskontrollbericht*). They provide a detailed account of the results achieved by the project concerned in the field of hydrogen research and innovation. These results include scientific and technical findings, experimental and testing results, the development and validation of models, simulations, digital tools and prototype systems, quantitative assessments of performance, emissions, resource needs and risks, as well as regulatory, environmental, safety and socioeconomic analyses leading to practical concepts, recommendations, roadmaps and educational materials.

(…) have been made available to the project promoter.

Each final report for the sampled projects refers on its first page to H2Giga, H2Mare, or TransHyDE. The German Federal Ministry of Education and Research identifies H2Giga, OffsH2ore (subsequently renamed H2Mare – see Evidence No. 6) and TransHyDE as the three hydrogen flagship projects arising from the ideas competition "Hydrogen Republic Germany" (Evidence No. 3). The call for this competition identifies Projektträger Jülich ("PTJ") as the project promoter, thereby establishing PTJ as the project promoter relevant for the purposes of target 19. The fact that PTJ acted as the project promoter for the three flagship projects is further corroborated by the letters sent by PTJ to the

coordinators of the three hydrogen flagship projects (Evidence No. 5), in which PTJ informs the recipients which project sketches were recommended for funding subject to conditions and invites them to submit the corresponding funding applications to PTJ. The letters also set out the applicable deadlines, project-specific requirements and recommendations and identify the relevant PTJ contact persons.

Germany provided an email from PTJ confirming that it had received from the grant beneficiaries all final reports listed in the annex to the email (Evidence No. 8). The annex contains 343 projects. The German authorities provided a spreadsheet listing 191 projects (Evidence No. 2) out of these 343 projects, thereby exceeding the target of 150 units. The 343 units in the annex each correspond to a specific project, and they include all 191 projects from the spreadsheet provided by Germany. Taken together, the email and its annex demonstrate that the final reports of all 191 projects have been made available to the project promoter.

Out of the 60 units sampled (Evidence No. 7), one unit failed as the corresponding final report did not describe the results achieved by the project. The evidence provided for a sample of 59 units confirmed that the requirements of the target have been met. Each of the 59 valid final reports describes the results achieved by the project concerned and has been made available to the project promoter, as demonstrated by the acknowledgment of receipt issued by PTJ (Evidence No. 8). Since the German authorities demonstrated that final reports for 191 projects have been made available to the project promoter and one sampled unit failed, the number of projects fulfilling the requirements of the target stands at 190, thus exceeding the goal of Target 19 by 40.

Furthermore, in line with the description of the measure, the projects supported shall be flagship projects for hydrogen research and innovation

Each final report for the 60 sampled projects refers on its first page to H2Giga, H2Mare or TransHyDE. These three projects are identified by the German Federal Ministry of Education and Research as the three hydrogen flagship projects arising from the ideas competition "Hydrogen Republic Germany" (Evidence No. 4 and 6). Since each of the 60 sampled projects forms part of one of these three flagship projects, all 60 sampled projects are accordingly flagship projects.

All 60 sampled projects are projects for hydrogen research and innovation, covering five thematic areas: (i) electrolyser materials and components; (ii) electrolyser manufacturing, automation and scale-up; (iii) system integration, infrastructure and water management; (iv) hydrogen transport, storage and derivatives; and (v) offshore Power-to-X and knowledge transfer. Each of these five thematic areas is covered by at least one sampled project (Evidence No. 7): nine projects concern the development of electrolyser materials and components, including catalyst synthesis, membrane electrode assemblies and degradation analysis; 16 projects address electrolyser manufacturing, automation and scale-up, including gigawatt-scale production lines, robotics, digital twins and quality assurance; four projects focus on system integration, infrastructure and water management, including orchestration of electrolyser system components, grid integration and water treatment; 22 projects address hydrogen transport, storage and derivatives, including pipeline conversion, ammonia reforming, liquid hydrogen logistics, LNG terminal repurposing and underground storage; and nine projects concern offshore Power-to-X processes and knowledge transfer, including offshore electrolysis, seawater treatment, liquefied methane production and regulatory transfer.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 21C Disbursement for the supported projects

Related Measure: 1.1.6 Federal support for efficient heat networks

Quantitative Indicator: EUR million

Baseline: 0

Target: 300

Time: Q2 2026

1. Context:

The objective of the measure is to contribute to the decarbonisation of district heating systems, expanding the share of heat from renewable sources and waste heat. It consists of financial support for transformation plans, feasibility studies and investment projects for heat networks.

Target 21C requires that at least EUR 300 000 000 have been disbursed for the supported projects.

Target 21C is the third and last target of the investment, and it follows the completion of target 21A and target 21B, related to the signature of grant decisions and the submission of feasibility studies and/or transformation plans, respectively.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Copy of the funding guideline Federal Support for Efficient Heat Networks (*Bundesförderung für effiziente Wärmenetze*, hereinafter referred to as 'BEW'), published on 18 August 2022 in the Federal Gazette (*Bundesanzeiger*). It entered into force on 15 September 2022.	Legal basis of the funding scheme, laying out the conditions of the scheme, including eligibility criteria.
3	Spreadsheet overview of funds disbursed	This document lists the amounts disbursed for each project. It contains the unique project reference number, the project type (in accordance with the modules listed in the funding guideline), the disbursement amounts per year and in total, as the well as the project name and location.

4A-4B	A sample of unique projects selected by the Commission	On the basis of a sample, the Commission has reviewed the following supporting documents: A) Grant decision. The grant decisions were issued between 21 October 2022 and 26 November 2024. B) Payment confirmation(s) issued by the Federal Office for Economic Affairs and Export Control (*Bundesamt für Wirtschaft und Ausfuhrkontrolle*, hereinafter referred to as 'BAFA'). These consist of a payment order (*Zahlungsanordnung)* including as an annex a list showing the respective payment(s) made. The payment orders are dated between 4 June 2023 and 2 June 2026.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

At least EUR 300 000 000 have been disbursed for the supported projects.

Financial support is provided based on the BEW funding guideline, which was published on 18 August 2022 in the Federal Gazette (*Bundesanzeiger*) and entered into force on 15 September 2022 (Evidence No. 2, page 13, section "8.1 Antragstellung, Vorhabenbeginn").

Germany has provided an overview table detailing the funds disbursed for each project (Evidence No. 3). The table contains a list of 1 140 projects showing a total disbursement of EUR 365.22 million for the supported projects. Payments are made on an annual basis, and each project has received one or more payments between 4 June 2023 and 2 June 2026.

Following the selection of a random sample of 60 projects, Germany submitted supporting documentation consisting of grant decisions and payment confirmations (Evidence No. 4A-4B). These documents were used to verify the supported projects and the amounts disbursed.

Each project corresponds to one funding case under the BEW funding programme and is identified by a unique project reference number. The unique project reference number enables each grant decision to be matched to the corresponding payment confirmation(s). The reference to the BEW funding guideline (Evidence No. 2) in the subject line of each grant decision (Evidence No. 4A) establishes the link between the project and the BEW funding programme.

The disbursement of the grant support to projects was therefore confirmed by cross-checking the payment confirmations (Evidence No. 4B), which consist of a payment order (*Zahlungsanordnung*) including as an annex a list showing the corresponding payment(s) made, with the information provided in the spreadsheet (Evidence No. 3). For each payment, the supporting documentation confirms the unique project reference number, the date of the payment order, and the amount disbursed to the supported project.

The evidence provided for the 60 sampled units confirmed that the requirements of the target have been met. Germany disbursed a total of EUR 365.22 million for the supported projects, thereby exceeding the target of EUR 300 million by EUR 65.22 million.

Furthermore, in line with the description of the measure, the measure consists of financial support for transformation plans, feasibility studies and investment projects for heat networks.

The BEW funding guideline (Evidence No. 2) contains three modules for funding. Feasibility studies and transformation plans are covered in module 1 of the BEW funding guideline (Evidence No. 2, section "*4.1 Modul 1: Transformationspläne, Machbarkeitsstudien*"). Investment projects for heat networks are covered in module 2 (systemic support for investment and operating expenditures) and module 3 (individual investment measures) (Evidence No. 2, section "*4.2 Modul 2: Systemische Förderung (Investitions- und Betriebskostenförderung)"* and section "*4.3 Modul: Einzelmaßnahmen"*).

The module and type of each sampled project was confirmed by cross-checking the module specified in the overview table (Evidence No. 3) against the corresponding grant decisions (Evidence No. 4A). Each grant decision specifies the type of project and the module in the introductory section (Evidence No. 4A), confirming that financial support was provided for transformation plans (module 1, 12 projects from the sample), feasibility studies (module 1, 26 projects from the sample), and investment projects for heat networks (module 2: 13 projects consisting in the construction of a new district heating network and three consisting in the transformation and expansion of existing networks; module 3: three projects related to biomass boilers, two related to pipe construction, one related to heat transfer stations).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 35 Orders of buses with alternative propulsion

Related Measure: 1.2.5 Support for purchases of buses with alternative propulsion

Quantitative Indicator: Number of buses ordered

Baseline: 0

Target: 2 800

Time: Q2 2026

1. Context:

The objective of the measure is to lower the CO2 emissions of transport. It consists in support for alternatively fuelled buses and related infrastructure and feasibility studies.

Target 35 relates to orders or order confirmations or contracts being issued for at least 2 800 buses with alternative propulsion. Target 35 is the second target of the investment, and it follows the completion of milestone 33, related to the publication of the funding guidelines.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Spreadsheet	This document shows a spreadsheet containing the unique identifier (row B), recipient's name (row C), reference of order (row D), number of ordered battery electric buses (Row E), number of ordered fuel cell buses (row F), brand (row G) and model (row H). Row 304 shows that 3043 buses have been ordered in total.
3	Sample of 60 units	On the basis of a sample, the Commission services have reviewed for each bus with alternative propulsion: i) Order confirmations, purchase agreement or contracts between a buyer and a manufacturer to confirm a sale, including vehicle specifications, additional infrastructure, quantities, prices, and delivery dates. ii) Grant decisions issued by project management Juelich (*Projekttrager Juelich*) acting on behalf of the Federal Ministry for Digital and Transport (*Bundesministerium für Digitales und Verkehr*, hereinafter referred to as "BMDV") to formally approve and administer a public subsidy. The grant decisions display the grant amount, conditions, and obligations to the recipient.
4	Link to a list of alternative propulsion buses	A link to a list of alternative buses displaying the nature of the vehicle in order to identify the propulsion of the model: https://www.ebustool.de/modelluebersicht/ (link verified by Commission services on 13 July 2026)
5	Feasibility studies (*Machbarkeitsstudien*)	These documents show three feasibility studies commissioned by German public transport bus operators and prepared by independent expert consultancies. Each study assesses the feasibility of converting the operator's diesel bus fleet to zero-emission drives,

		examining vehicle technologies, depot and charging infrastructure, operational planning and costs. They conclude with technology recommendations and implementation roadmaps for the transition to clean bus fleets in line with the Clean Vehicles Directive.

3. Analysis:

The justification and substantiating evidence provided by the Germany authorities cover all constitutive elements of the target.

Orders or order confirmations or contracts have been issued for at least 2 800 buses with alternative propulsion.

Furthermore, in line with the measure description, **it consists in support for alternatively fuelled buses (…)**

The German authorities submitted a spreadsheet (Evidence No. 2) listing orders of alternatively fuelled (meaning. zero-emission) buses placed by various public transport operators in Germany. It has 308 rows across eight columns, each row representing a single order with a unique identifier, the recipient (the transit authority/operator), the order reference number, the quantity of battery-electric or fuel-cell buses ordered, and the manufacturer/brand and model.

Following the selection of a random sample of 60 units (Evidence No. 3, i) and ii)), Germany submitted orders, order confirmations or contracts to demonstrate their issuance. The evidence provided for a sample of 60 units confirmed that the requirements of the target have been met. For each order, order confirmation or contract (Evidence No. 3, i)) – either issued by the grant recipient to the manufacturer or by the manufacturer to the grant recipient – the Commission services verified that the document date was confirmed to be no earlier than February 2020; the name of the recipient and corresponding unique identifier were cross-referenced against the spreadsheet (Evidence No. 2) and the grant decisions (Evidence No. 3, ii)); and the reference to funding guidelines on the grant decisions was confirmed (Evidence No. 3, ii)). The nature of the propulsion (battery electric and fuel cell) indicated on the orders, order confirmations or contracts was also confirmed by cross-checking against both the overview spreadsheet (Evidence No. 2) and the vehicle model list (Evidence No. 4). The orders, order confirmations, and contracts reviewed were issued between March 2022 and October 2025 (Evidence No. 3, i), while the corresponding grant decisions were issued by the BMDV between January 2022 and November 2024 (Evidence No. 3, ii)). Altogether, the order for a total of 3043 buses – out of which 2630 are battery-electric and 413 are fuel cell buses – have been confirmed, thereby exceeding the target of 2800 buses by 243 buses (Evidence No. 2-4).

Furthermore, in line with the measure description, **It consists in support for alternatively fuelled buses and related infrastructure and feasibility studies.**

In addition to the alternatively fuelled buses (Evidence No. 3), the sampled procurement documents demonstrate that support extended beyond the bare vehicles themselves to related infrastructure such as the battery systems on which the operation of battery-electric buses depends. In sampled procurement documents such as orders, order confirmations and purchase agreements (Evidence No. 3) the traction batteries were deliberately separated from the vehicles within the order structure: while the batteries themselves, upgrades of the battery capacity to larger 525 kWh packs, and mandatory as well as optional warranty extensions were each itemised as distinct, individually priced positions (Evidence No. 3). In addition, Germany submitted three feasibility studies. In each

case, a public transport operator commissioned a feasibility study from a qualified independent consultancy - pwc - providing the technical, operational, legal, infrastructural and economic analysis that operators require before committing to the procurement of zero-emission buses and the conversion of their depots (Evidence No. 5).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 38 Order of rail vehicles with alternative propulsion

Related Measure: 1.2.6 Support to promote alternative rail propulsion

Quantitative Indicator: Number of rail vehicles ordered

Baseline: 0

Target: 200

Time: Q2 2026

1. Context:

The objective of this measure is to replace rail vehicles to achieve a significant reduction in CO2 emissions and air pollutants. It consists of financial support for the procurement of rail vehicles with alternative propulsion and/or the conversion to alternative engines.

Target 38 consists of orders or order confirmations or contracts that have been issued for at least 200 rail vehicles (locomotives) with alternative (to conventional diesel) propulsion.

Target 38 is the second and last target of the investment, and it follows the completion of milestone 36, related to the entry into force of the funding guidelines.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Spreadsheet with an overview of the orders, order confirmations and contracts for the rail vehicles	The spreadsheet lists orders, order confirmations and contracts for the purchase of a total of 245 rail vehicles with alternative propulsion. It includes: • Unique identifiers • Beneficiaries • Order references • Details about propulsion type (battery electric, dual mode, hybrid, hydrogen-powered) • Manufacturer • Model • Weblinks to the model type
3	Copy of grant decisions	Copies of 17 grant decisions issued by the BMDV in cooperation with project implementing partner project centre Jülich between 18 November 2021 and 19 December 2023.
4	Copy of orders, order confirmations or contracts	Copies of orders or order confirmations or contracts for 18 projects.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

Orders or order confirmations or contracts have been issued for at least 200 rail vehicles (locomotives)

The German authorities submitted a spreadsheet (Evidence No. 2) containing an overview of 18 projects.

For these 18 projects, 17 grant decisions and one funding contract were submitted (Evidence No. 3). One project is listed with two different unique identifiers, 03TZ2002D_1 and 03TZ2002D_2, since two separate orders were placed. However, they belong to the same project (Evidence No. 2). The grant decisions were issued by the Federal Ministry for Digital and Transport (*Bundesministerium für Digitales und Verkehr* (hereinafter referred to as "BMDV")) in cooperation with the project implementing partner, project centre Jülich (hereinafter referred to as "ptj") between 18 November 2021 and 19 December 2023. Under section 2 "Additional Provisions and Notes", it is stated that funding is provided via the funding guideline for the grant scheme to promote alternative rail propulsion. The funding contract (Evidence No. 3) equally contains a reference to the funding guideline on page 2, linking the funding to the Recovery and Resilience Plan.

For each of the 18 projects, the spreadsheet (Evidence No. 2) contains an indication of the number of ordered rail vehicles, amounting to 245 vehicles in total. These orders are documented across three purchase agreements, seven order confirmations and seven contracts (Evidence No. 4), issued by the grant recipients to rail vehicle manufacturers (Evidence No. 3). For each order, order confirmation or purchase agreement (Evidence No. 4), the recipient's name and unique identifier were cross-referenced against the spreadsheet (Evidence No. 2) and the grant decisions (Evidence No. 3); the dates were verified as falling within the RRF framework; the model of the vehicles was verified according to the link provided in the spreadsheet (Evidence No. 2); and the signatures were confirmed where applicable. According to the evidence provided, Germany completed orders, order confirmations or contracts for 245 vehicles, thus exceeding the goal of target 38 by 45.

with alternative (to conventional diesel) propulsion. Furthermore, in line with the description of the measure, the measure consists of **financial support for the procurement of rail vehicles with alternative propulsion and/or the conversion to alternative engines.**

The orders, order confirmation and contracts (Evidence No. 4) were issued for 124 battery electric rail vehicles, 44 dual mode rail vehicles, 74 hybrid rail vehicles and three hydrogen rail vehicles. All four of these propulsion systems rely on an alternative to conventional diesel propulsion. Where the propulsion system was not evident from the contract, order or order confirmation, the Commission services verified the propulsion via links to the ordered rail models through links provided in the spreadsheet (Evidence No. 2). This was the case for identifiers 03TZ1001A, 03TZ1002A, 03TZ1026A, 03TZ2002D_2, 03TZ2018F, 03TZ3004A. For these cases, the Commission services accessed the link provided by the authorities on the model type to verify that the ordered rail vehicles' propulsion systems were alternative to conventional diesel. This check was completed successfully, confirming that the ordered rail vehicles' propulsion systems are alternative to conventional diesel. For one identifier (03TZ2005B), the rail vehicle was converted to a battery electric rail vehicle, consistent with the measure's provision for conversion to alternative engines. The Council Implementing Decision states that "the measure consists of financial support for the procurement of rail vehicles with alternative propulsion". Germany's Recovery and Resilience Plan, however, makes no reference to public procurement as a mechanism for acquiring the aforementioned vehicles but it rather established this measure as a 'grant scheme' under the title "Grants to promote alternative propulsion systems in rail transport" ("*Zuschüsse zur Förderung alternativer Antriebe im Schienenverkehr*"), in order to support the acquisition or conversion of rail vehicles by both public

authorities and private legal entities. In light of the contextual and purposive interpretation of this requirement from the Council Implementing Decision, it is interpreted as referring to financial support to 'obtain' alternative-propulsion rail vehicles under the measure, rather than to carry out a public procurement procedure. This interpretation is consistent with the design of the measure in the German RRP as a grant scheme addressed to different types of recipients, including private operators. The evidence submitted shows that, under this scheme, contracts or binding orders were concluded for the purchase or conversion of 245 rail vehicles. On this basis, it is considered that this constitutive element of the target is satisfactorily fulfilled.

Thus, the evidence submitted confirms that all 245 rail vehicles supported under the scheme, either through direct purchase or through conversion, use propulsion alternative to conventional diesel in line with the description of the measure.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 41 Provision of services via Technology and Innovation Centre(s) for Hydrogen Technology

Related Measure: 1.2.7 Promotion of the industries involved in hydrogen and fuel cell applications in transport

Qualitative Indicator: Provision of services

Time: Q2 2026

1. Context:

The objective of this measure is to support a supply industry for hydrogen and fuel cell technology to facilitate the decarbonisation of the transport industry. The measure consists of financial support to projects and Technology and Innovation Centre(s).

Milestone 41 relates to the provision of services for, for example, the development of fuel cell or electrolysis systems, subsystems or components; feasibility studies; market studies; patent research; simulation of existing components or their assembly; development of specifications for components or their assembly; and visualisations of components, stacks or systems by the Technology and Innovation Centre(s).

Milestone 41 is the third and last milestone of the investment, and it follows the completion of milestone 39 and target 40, related to the entry into force of amendments extending the existing supporting guidelines and the issuance of grant decisions for at least 268 R&D and market activation projects for hydrogen and fuel cell applications in transport.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the milestone (including all its constitutive elements, as set out in the description of the milestone and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Funding guidelines	Funding guidelines for projects related to the establishment of a decentralised innovation and technology centre for hydrogen (*Richtlinie zur Förderung der Vorhaben im Zuge des Aufbaus eines dezentralen Innovations- und Technologiezentrum Wasserstoff*), which were published by the Federal Ministry for Digital and Transport (*Bundesministerium für Digitales und Verkehr)* on 22 March 2024 and entered into force on 1 April 2024. https://www.ptj.de/foerdermoeglichkeiten/itz-h2
3	Amendments to the funding guidelines	Amendments to the funding guidelines for projects related to the establishment of a decentralised innovation and technology centre for hydrogen, which were published by the Federal Ministry for Digital and Transport (*Bundesministerium für Digitales und Verkehr)* on 6 December 2024 and entered into force that same day. https://www.ptj.de/lw_resource/datapool/systemfiles/cbox/16571/live/lw_bekdoc/24-12-16_aenderungsbekanntmachung-itz-h2.pdf
4	List of projects funded under the framework for establishing a	This document shows a list of projects containing; i) unique identifiers (column A); ii) names of recipients (column B); and iii) State aid number

	decentralised innovation and technology centre for hydrogen	
5	Copy of grant decisions issued for all projects under the Hydrogen Innovation Centre	The grant decisions were issued by the Federal Ministry for Digital and Transport (*Bundesministerium für Digitales und Verkehr*) and Project Management Agency Jülich (*Projektträger Jülich*) to Hydrogen Innovation Centre (hereinafter referred to as "HIC") GmbH on 16 December 2024 for a set of different sub-projects: • Sub-project A for non-economic research infrastructure • Sub-project B for local infrastructure for lab and office space • Sub-project C for outdoor testing field • Sub-project D for testing equipment
6	Development Services for the Institute for innovative technologies ('*Institut für innovative Technologien'*, ITW)	These documents show a service offer, order confirmation and an invoice for a research and development (R&D) project commissioned by ITW Chemnitz for the design and construction of a hydrogen-based fuel cell stack model: • The offer, issued on 2 September 2025, outlines the technical scope—developing a modular, reversible fuel cell stack using realistic components to enable testing of new sensor technologies under practical conditions. • The formal contract confirms the execution of this work between September and December 2025. • The invoice issued on 8 December 2025 documents the completion of the project, detailing the included engineering tasks (such as component selection, assembly system design, and performance testing) and the total cost.
7	Market Study for BTL Medical Technologies	These documents show a service offer by HIC Chemnitz, an invoice and a final study for the "Market Study: Grid balancing services with an AWE electrolyser in Germany" for BTL Medical Technologies: • The first document is an offer dated 27 May 2025, outlining a short study addressing regulatory, technical, commercial and contractual aspects. • The second document is the invoice issued on 20 June 2025 for the completed work carried out between 2 June 2025 and 18 June 2025. • The third document is the study itself, which provides a detailed analysis of market access conditions, technical performance requirements, revenue models, risks, and contractual frameworks for operating a 1 MW electrolyser in German balancing markets.
8	Design and construction demonstration model of a Proton Exchange Membrane (PEM) fuel cell system	These documents show a service offer and purchase order by HIC Chemnitz to the Fraunhofer Institute for Machine Tools and Transformation *('Fraunhofer-Institut für Werkzeugmaschinen und Umformtechnik'*, IWU). • The service offer issued on 4 February 2026 by HIC Chemnitz to the Fraunhofer Institute for Machine Tools and Transformation for the development and delivery of a visualisation model of a Proton Exchange Membrane (hereinafter referred to as "PEM") fuel cell system with wall

		mounting, intended for training, exhibition, and demonstration purposes. • A purchase order dated 19 March 2026 from Fraunhofer IWU back to HIC. It involves the design and manufacture of a wall-mounted, 3D-printed demonstration model of a PEM hydrogen fuel cell system, featuring 20 removable magnetically attached, colour-coded components on an acrylic base plate, intended for training and exhibition purposes.
9	Link to the platform for the HIC	The website refers to the funding guideline for projects in the course of establishing a decentralised innovation and technology centre for hydrogen, as well as to the funding of the measure under the German Recovery and Resilience Plan. https://hic-chemnitz.eu/en/ (link verified by Commission services on 29 April 2026)

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

in line with the description of the measure, **the measure consists of financial support to projects and Technology and Innovation Centre(s).**

The funding guideline for projects related to the establishment of a decentralised innovation and technology centre for hydrogen were published by the Federal Ministry for Digital and Transport (*Bundesministerium für Digitales und Verkehr*) on 22 March 2024 and entered into force on 1 April 2024 (Evidence No. 2). The funding guidelines were subsequently amended on 6 December 2024 to reflect changes in the percentage of costs that could be covered by the funding (Evidence No. 3). The preamble to the funding guideline (Evidence No. 2) explains that, following a location competition (*Standortwettbewerb*), four locations were chosen for a decentralised Technology and Innovation Centre (hereinafter 'HIC'), including the location East - HIC in Chemnitz. The grant decisions (Evidence No. 5) issued to HIC on 16 December 2024 refer to the budget line covering the HIC and the funding guideline (Evidence No. 2) in the subject line. In addition, the HIC website (Evidence No. 9) explicitly refers to the funding guidelines and the funding under the German Recover and Resilience Plan. Accordingly, the HIC was funded under these guidelines.

The Technology and Innovation Centre(s) shall provide services for, for example, the development of fuel cell or electrolysis systems, subsystems or components; feasibility studies; market studies; patent research; simulation of existing components or their assembly; development of specifications for components or their assembly; and visualisations of components, stacks or systems.

The grant decisions issued on 16 December 2024 (Evidence No. 5) by the Federal Ministry for Digital and Transport and Projektträger Jülich to HIC, the technology and innovation centre under assessment, and provide financial support to projects by establishing the infrastructure and capacities necessary to provide services, including research infrastructure, testing facilities, and equipment. The provision of development services for fuel cell systems, subsystems, and components is demonstrated by ITW Development services (Evidence No. 6), which comprise a research and development project involving the design and construction of hydrogen-based fuel cell stack model, the scope of work including component selection, assembly system design and performance testing.

Furthermore, the provision of services for market studies is evidenced by the BTL Market study (Evidence No. 7), which provides an assessment of the regulatory, technical, commercial and contractual conditions for operating and electrolyser in German balancing markets.

Regarding the visualisation of components, the design and construction of a proton exchange membrane fuel cell system demonstration model (Evidence No. 8) highlight the development of a physical model designed for training, exhibition and demonstration purposes, thereby providing tangible visualisation of a fuel cell system.

Finally, the platform for the HIC (Evidence No. 9) confirms the existence of an accessible interface through which such services are communicated and made available to stakeholders.

Taken together, the legal framework, the established infrastructure, and the documented service activities demonstrate that the HIC Chemnitz effectively provides a range of services reflecting the examples listed in the milestone description. These include the development of fuel cell systems and components, feasibility and market studies, simulation and specification activities, as well as the visualisation of systems (Evidence No. 6-9).

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 45 Urban neighbourhood projects

Related Measure: 1.3.2 Municipal living labs for the energy transition

Quantitative Indicator: Number

Baseline: 0

Target: 10

Time: Q1 2026

1. Context:

The objective of this measure is to explore and demonstrate solutions for the efficient and sustainable energy supply of urban neighbourhoods. The measure consists of grants to municipal living labs for installations related to efficient and sustainable energy supply.

Target 45 consists in the provision of energy balance reports of the 10 local energy systems, demonstrating that the systems have been tested or are being piloted.

Target 45 is the second and last target of the investment, and it follows the completion of target 44, related to the approval of "living labs".

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Energy balance reports of three separate energy systems [1], [2] and [3] developed as part of the "Delta" living lab, issued by the corresponding project management with all project partners, from January 2026	Energy balance reports of three separate energy systems [1], [2] and [3] developed as part of the "Delta" living lab. This report explains the two tests: 1) two ways of heating a new residential quarter: one with cold heat network Baufelder A5/A6, 5 buildings, and another one with 76 apartments under combined heat power (hereinafter referred to as "CHP" for a local heat network; 2) a shared neighbourhood battery in Fürth.
3	Map of Darmstadt Ludwigshöhe *(LHV_Übersichtsplan Dez._2025)*	Map of Darmstadt Ludwigshöhe indicating the different building areas of the energy systems [1] and [2].
4	Map of Darmstadt Ludwigshöhe *(ENTEGA_Fernwaerme_Ludwigshoehviertel)*	Map of Darmstadt Ludwigshöhe, indicating the different sections which are supplied by the two energy systems [1] and [2].
5	Energy performance certificate of one building that is supplied by the energy system [1], from 31 October 2025	Energy performance certificate of one building that is supplied by the energy system [1] certifying energy efficiency class A+, issued by an engineer. This is the exemplary building for the cold heat network (A5/A6 described above).
6	Energy performance certificate of one building that is supplied by the	Energy performance certificate of one building that is supplied by the energy system [1] certifying energy

	energy system [2], from 25 September 2025	efficiency class B, issued by Bollinger und Grohmann Consulting. This is an exemplary building on the KWK-Nahwärmenetz (A8/A12/C7/C11/C15) described in Evidence No. 2.
7	Certificate of the energetic assessment of the heating network of the energy system [2] issued by ENTEGA AG, in June 2025	Certificate of the energetic assessment of the heat network pursuant to FW 309 Parts 1 and 7, confirming the network's primary energy factor (0.47) and emission factor (44 g CO_2eq/kWh), issued for the system operated by ENTEGA AG. [2]
8	Proof that the storage system [3] is registered in the national database (*"Marktstammdatenregister Quartierspeicher"*), 27 September 2023	An official registration confirmation from the Federal Network Agency's Core Energy Market Data Register (*Bundesnetzagentur Marktstammdatenregister*) for a power generation unit/electricity storage for ENTEGA AG issued by the *Bundesnetzagentur* on 27 September 2023.
9	Commissioning report of the storage system [3], 24 November 2023 *("Delta3 Inbetriebnahmeprotokoll_Quartierspeicher")*	Meter installation/commissioning record from the distribution grid operator issued by the distribution grid operator for the region (e-netz Südhessen) addressed to Entega AG issued on 24 November 2023.
10	Energy balance report of the energy system [4], which is part of living lab GWP *(GWP1_Investvorhabenreporting_EU_EnBW)*, issued by the corresponding project management with all project partners, 20 January 2026. Annex: *Betriebsübernahme* from 25 April 2025	The energy balance report describes the functioning of the energy system GWP Stuttgart Münster[4] which uses a large heat pump (GWP) in a combined heat and power plant using waste heat from the cooling water from waste incineration for the district heating network. On page 13, there is an annexed copy of the certificate of takeover of operations (*Betriebsübernahme*) signed between Mitsubishi (supplier) and EnBW (project owner).
11	Energy balance report of the energy system [5], which is part of living lab GWP *(GWP2_Investvorhabenreporting_EU_FHW)*, issued by the corresponding project management with all project partners, from 20 January 2026. Annex: *Fertigstellungsbestätigung* from 12 April 2023	The energy balance report describes the functioning of the energy system GWP FHW Neukölln [5], which enables the utilisation of the unused waste heat from the five combined heat and power plants connected to the large heat pump. On page 13, there is an annexed copy of the certificate of completion (*Fertigstellungsbestätigung*) signed between Zeppelin Power Systems (supplier) and FHW (project owner).
12	Energy balance report of the energy system [6], which is part of living lab GWP *(GWP3_Investvorhabenreporting_EU_MVV)*, issued by the corresponding project management with all project partners, from 20 January 2026. Annex:	The energy balance report describes the functioning of the energy system GWP Mannheim [6], which uses a large river heat pump at the Grosskraftwerk Mannheim AG (GKM) site. On page 13, there is an annexed copy of the certificate of completion/takeover of operations (*Fertigstellungsbestätigung/Betriebsübernahme*) signed between Siemens Energy (supplier) and GKW Mannheim (project owner).

	Fertigstellungsbestätigung from 1 December 2023	
13	Energy balance report of the energy system [7], which is part of living lab GWP (*GWP4_Investvorhabenreporting_EU_SWRO*), issued by the corresponding project management with all project partners, from 2 July 2026	The energy balance report describes the functioning of the energy system GWP Rosenheim [7] which has several large heat pumps that are being operated in a combined heat and power plant as part of three Innovative Combined Heat and Power (iCHP) systems and researched in the living lab.
14	Acceptance report of the heating network of the energy system [7] and its protocol, 14 April 2022 *(Abnahmeprotokoll WP1)* *(Abnahme Bescheinigung JCI WP1)*	Acceptance report and corresponding protocol of the heating network of the energy system [7] GWP Rosenheim, between Johnson Controls (supplier) and Stadtwerke Rosenheim (project owner).
15	Energy balance report of the energy system [8], which is part of living lab GWP (*GWP4_Investvorhabenreporting_EU_BEW*), issued by the corresponding project management with all project partners, 20 January 2026	The energy balance report describes the functioning of the energy system GWP Köpenick [8] which has a large heat pump operated in conjunction with storage tanks, which are fed by a solar thermal system, a new air-source heat pump and other waste heat sources, and is connected to an existing district heating network
16	Status report on commissioning of the energy system [8], TÜV Rheinland, 23 July 2026	Status report on commissioning of the heating network of the energy system [8] GWP Köpenick testifying testing activities
17	Statement by the project provider Projektträger Jülich on energy system [8], 23 July 2026	The statement is confirming the testing of the GWP plant in Berlin Köpenick [8], then in cold commissioning
18	Futron test report Berlin Köpenick on energy system [8], 17 November 2025	This document is a test report by the company Futron confirming the working of the control cabinet (*Schaltschrank*) at the BEW side in Berlin Köpenick [8]
19	Commissioning, Inspection, and Maintenance Log of energy system [8], Weska, 2 December 2025	This document is a commissioning protocol by the company Weska GmbH/Grasso from December 2025 confirming the perfect working of the heat pump compressor at the Reallabor Köpenick WP1
20	Refrigeration system inspection report of energy system [8], Weska, 14 March 2026	This document is a test report by the company Weska GmbH/Grasso on the inspection of the stationary electrical refrigeration system
21	Energy balance report of the energy system [9], which is part of living lab TransUrban *(Seestadt Berichterstattung DARP TransUrban.NRW)*, issued by the corresponding project management with all project partners, 31 January 2025	The energy balance report describes the functioning of the energy system TransUrban, Mönchengladbach Seestadt [9] which has a targeted, insulated two-pipe local heating network to provide heating and pre-heat domestic hot water
22	Acceptance report of the heating	Acceptance report of the heating network of the

	network of the energy system [9] *(Seestadt Abnahmeprotokoll_Fernwärme_Trasse)*, 9 May 2023	energy system [9], signed between Avacon Natur GmbH (supplier), Berns Gebäudetechnik, Stadtentfalter GmbH
23	Acceptance report of the heat transfer station of the energy system [9] *(Seestadt Abnahmeprotokoll_FW-ÜGST)*, 9 May 2023	Acceptance report of the heat transfer station of the energy system [9], signed between Avacon Natur GmbH (supplier), Berns Gebäudetechnik, Stadtentfalter GmbH
24	Acceptance report of the technology centre of the energy system [9] (*Seestadt Abnahmeprotokoll_Technikzentrale*) , 21 February 2024	Acceptance report of the technology centre of the energy system [9] signed between Avacon Natur GmbH (supplier), Berns Gebäudetechnik, New Smart City GmbH
25	Energy balance report of the energy system [10], which is part of living lab TransUrban (*Hassel - 2026-01_DARP Berichterstattung*) issued by the corresponding project management with all project partners	The energy balance report describes the functioning of the energy system TransUrban Gelsenkirchen, Kokerei Hassel [10], which has a unidirectional, uninsulated local heating network serving as the source for the decentralised heat pumps and a geothermal field and the network acting as a heat collector
26	Acceptance report of the technical centre of the energy system [10], 29 October 2024 *(Hassel - Abnahmeprotokoll Technikzentrale 29.10.24_unterschrieben)*	Acceptance report of the technical centre of the energy system [10], signed between Grüne Quartiere GmbH (supplier) and Berns Gebäudetechnik (contractor)

3. Analysis:

The justification and substantiating evidence provided by the Germany authorities cover all constitutive elements of the target.

Energy balance reports of the 10 local energy systems shall be provided, demonstrating that the systems have been tested or are being piloted. The work on the local energy systems was carried out within joint projects. Each joint project consists of several sub-projects related to efficient and sustainable energy supply (see evidence No. 2, 10, 11, 12, 13, 15, 21, 25). The funded investments are not only intended to install sustainable technology but also to conduct applied research with the aim of rolling out the findings to other cases in Germany and Europe.

The following table provides an overview of the ten local energy systems implemented as part of the measure across three living labs for the energy transition (Delta, TransUrban, GWP).

No	Acronym	Geographical location	Technology Focus
1	Delta	Darmstadt, Ludwigshöhe	Cold district heating
2	Delta	Darmstadt, Ludwigshöhe	Biogas CHP
3	Delta	Fürth (Hessen)	Neighbourhood battery storage
4	GWP	Stuttgart, Münster	Large heat pump
5	GWP	Berlin, Neukölln	Large heat pump
6	GWP	Mannheim	Large heat pump
7	GWP	Rosenheim	Large heat pump
8	GWP	Berlin, Köpenick	Large heat pump
9	TransUrban	Mönchengladbach, Seestadt	Cold district heating
10	TransUrban	Gelsenkirchen, Kokerei Hassel	Cold district heating

As part of the **Delta living lab**, which focuses on practical energy optimisation, grid flexibility, and community integration, three local energy systems have been implemented:

- Energy system Delta, Darmstadt, Ludwigshöhe (cold district heating) [1] counts five residential buildings connected to a cold heat network with geothermal borehole probes and supplied with heat via geothermal heat pumps, where photovoltaic modules (PV) and photovoltaic-thermal modules (PVT) modules provide solar electricity and solar heat, whilst exhaust air heat pumps utilise the heat from the ventilation systems (Evidence No. 2, page 3). The scheme comprises building areas A5 and A6, which can be seen on the map in Evidence No. 3. The energy balance report confirms that the local energy system has been tested (Evidence No. 2), and a sample energy performance certificate is available for a building connected to the cold district heating network (Evidence No. 5), whereas the map (Evidence No. 4) shows all the buildings supplied by the system.
- Energy system Delta, Darmstadt, Ludwigshöhe (biogas CHP) [2] counts twelve residential buildings that have been connected to ENTEGA AG's Ludwigshöhviertel local heating network where a biomethane combined heat power (hereinafter referred to as "CHP") plant serves as the main heat generator for the local heating system (Evidence No. 2, page 3). The system comprises construction areas A8, A12, C7, C11 and C15 (see map, Evidence No. 3). The energy balance report confirms that the local energy system has been tested and is operational (Evidence No. 2), and a sample energy performance certificate is available for a building connected to the CHP local heating network (Evidence No. 6) as well as a certificate confirming the energy assessment by ENTEGA AG (Evidence No. 7).
- Energy system Delta, Fürth (Hessen) Neighbourhood battery storage [3] consists in a district storage unit (electrical output of 240 kW, storage capacity 288 kWh) (Evidence No. 2, page 6). The energy balance report confirms the system has been tested (Evidence No. 2). Furthermore, installation and commissioning are testified by the commissioning report (Evidence No. 9) and the entry in the national market data register (Evidence No. 8), demonstrating that the tests were performed and passed.

From the **GWP living lab** which focuses on operating concepts for the use of large heat pumps, five local energy systems have been implemented:

- Energy system GWP Stuttgart Münster [4] uses a large heat pump in a combined heat and power plant using waste heat from the cooling water from waste incineration for the district heating network (Evidence No. 10, page 2). The energy balance report confirms the system has been tested and is operational (Evidence No. 10, pages 7-8), and the certificate of

completion/takeover of operations annexed on page 13 of Evidence No. 10 also confirms that testing has been finalised.

- Energy system GWP FHW Neukölln [5] enables the utilisation of the unused waste heat from the five combined heat and power plants connected to the large heat pump (Evidence No. 11, page 2). The energy balance report confirms the system has been tested and is operational (Evidence No. 11, page 7) and the certificate of completion annexed on page 13 of Evidence No. 11 also confirms that commissioning has taken place – meaning the tests were performed and passed.
- Energy system GWP Mannheim [6] uses a large river heat pump at the Grosskraftwerk Mannheim AG (GKM) site (Evidence No. 12, page 2-3). The energy balance report confirms that the system has been tested and is operational (Evidence No. 12, page 7), and the certificate of completion/takeover of operations annexed on page 13 of Evidence No. 12 confirms that commissioning has taken place, thereby confirming that the tests were performed
- Energy system GWP Rosenheim [7] has several large heat pumps that are being operated in a combined heat and power plant as part of three Innovative Combined Heat and Power (iCHP) systems and researched in the living lab (Evidence No. 13, page 2). The energy balance report confirms that the system has been tested and is operational (Evidence No. 13, page 6), and the acceptance certificate also shows that commissioning has taken place, thereby confirming that the tests were performed (Evidence No. 14).
- Energy system GWP Köpenick [8] has a large heat pump operated in conjunction with storage tanks, which are fed by a solar thermal system, a new air-source heat pump and other waste heat sources and is connected to an existing district heating network (Evidence No. 15, pages 2-3). The energy balance report confirms that the system has been tested (Evidence No. 15, page 6). Various status and test reports also show that testing has taken place (Evidence No. 16-20).

From the **TransUrban** living lab which focuses on transforming the heat supply at five locations in North Rhine-Westphalia with fifth-generation heating networks that integrate renewable energy and waste heat at all temperature levels, two local energy systems have been implemented:

- Energy system TransUrban, Mönchengladbach Seestadt [9] has a targeted, insulated two-pipe local heating network to provide heating and pre-heat domestic hot water (Evidence No. 21, pages 2-3). The energy balance report confirms that the system has been tested and is operational (Evidence No. 21, page 5) and acceptance reports are available for the heating network (Evidence No. 22), the technology centre (Evidence No. 24) and the heat transfer station (Evidence No. 23).
- Energy system TransUrban Gelsenkirchen, Kokerei Hassel [10], has a unidirectional, uninsulated local heating network serving as the source for the decentralised heat pumps and a geothermal field and the network acting as a heat collector (Evidence No. 21, page 4). The local energy system has been commissioned (see acceptance report of the technical centre of the energy system, Evidence No. 26) and the energy balance report confirms that the system has been tested and is operational (Evidence No. 25, page 5).

Altogether, the evidence demonstrates that all ten local energy systems developed under the three living labs have been tested; most of them have gone beyond the testing or piloting stage and are in operation:

- Within the DELTA living lab, the biomethane CHP local heating system [2] has been tested and is now in operation, the cold district heating system [1] has also been tested under scientific monitoring by Technische Universität Darmstadt, and the neighbourhood battery storage [3] has been installed, tested and commissioned (Evidence No. 2, 5–9).
- Within the GWP living lab, the large heat pump systems in Stuttgart Münster [4], FHW Neukölln [5], Mannheim [6] and Rosenheim [7] have been tested and are now in operation, with commissioning confirmed by certificates of completion or acceptance reports, and the Köpenick system [8] has successfully completed a full test run (Evidence No. 10–16).
- Finally, within the TransUrban living lab, the systems in Mönchengladbach Seestadt [9] and Gelsenkirchen, Kokerei Hassel [10], have been tested and are now in operation, with commissioning confirmed by acceptance reports (Evidence No. 21–26).

Energy balance reports have been provided for all ten systems.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 48 Confirmation after execution of energy-efficient renovations of a further 30 000 housing units

Related Measure: 1.3.3 Building renovation: federal funding for energy-efficient buildings

Quantitative Indicator: Number

Baseline: 10 000

Target: 40 000

Time: Q2 2026

1. Context:

The objective of this measure is to support the energy-efficient renovation of residential buildings. The measure consists of renovation programmes with at least a medium-depth level renovation as defined in Commission Recommendation (EU) 2019/786 on Building Renovation and in individual measures also including a 10% funding bonus for exchanging functioning oil/coal-based heating and gas boilers that are older than 20 years.

Target 48 requires the confirmation after execution (*Bestätigung nach Durchführung*) of energy-efficient renovations of a further 30 000 housing units.

Target 48 is the fourth and last target of the investment, and it follows the completion of milestone 46, target 47 and target 48B, respectively related to the publication of funding guidelines for the support of energy-efficient renovation of buildings, to the confirmation after execution (*Bestätigung nach Durchführung*) of energy-efficient renovations of 10 000 housing units, and to the completion of 145 000 individual renovation measures for energy-efficient buildings.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Description of methodology	A detailed description of the method used to calculate the primary energy savings per residential building, issued jointly by the Institute for Energy and Environmental Research ('*Institut für Energie- und Umweltforschung*', hereinafter referred to as 'ifeu'), the Research Institute for Thermal Insulation ('*Forschungsinstitut für Wärmeschutz e.V.*', hereinafter referred to as 'fiw'), the Institute for Technical Building Equipment Dresden ('*Institut für Technische Gebäudeausrüstung Dresden*', hereinafter referred to as 'iTG') and Prognos.
3	List of 36 000 renovated housing units	This document contains a list of 36 000 renovated housing units including the corresponding primary energy savings.
4	Evidence on a sample of 60 confirmations after execution selected by the	For each of the 60 units, the following documentary evidence was provided: approvals of the application (*Bewilligung*), issued by the implementing institution Credit Institute for Reconstruction (*Kreditanstalt für Wiederaubau*, hereinafter referred to as 'KfW'),

	Commission	certificates of application of renovation actions (*Bestätigung zum Antrag - BzA*) and certifications of confirmation after execution of energy efficiency works *(Bestätigung nach Durchführung - BnD*), both issued by energy experts and standardised by the KfW.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

Confirmation after execution (*Bestätigung nach Durchführung*) of energy-efficient renovations of a further 30 000 housing units. Furthermore, in line with the measure description, **the measure consists of renovation programmes with at least a medium-depth level renovation as defined in Commission Recommendation (EU) 2019/786 on Building Renovation.**

Germany submitted a list of buildings containing 36 000 renovated housing units (Evidence No. 3). Following the selection of a random sample of 60 units by the Commission, Germany submitted certificates of application of renovation actions (*Bestätigung zum Antrag - BzA*), approvals of the application (*Bewilligung*) and certificates of confirmation after execution of energy efficiency works (*Bestätigung nach Durchführung - BnD*) (Evidence No. 4), for each sampled unit. The evidence provided for a sample of 60 units confirmed that the requirements of the target have been met. The Commission verified that the housing units and applicants were matching across all documents and that the confirmation after execution had been issued. The presence of these documents demonstrated that each sampled unit had completed renovation measures and that it increased its energy efficiency class at least to the level of 100 (100 up to 40 - lower numbers indicate a higher degree of energy efficiency). According to the evidence provided, Germany completed 36 000 energy-efficiency renovation, thus exceeding the goal of target 48 by 6 000.

The fulfilment of a minimum 30% primary energy demand reduction on average was confirmed by the 60 sampled interventions (Evidence No. 4), as laid out by Evidence No. 3. The ex-post energy savings of each individual housing unit were calculated following a methodology elaborated by several scientific institutions, including Prognos, ifeu, fiw and ITG Dresden (Evidence No.2). Main cornerstones of this methodology are:

- The primary energy emissions ex ante (before implementation of the measure) are determined for a selected sample using the building model from the fiw. Each individual case from the survey of the funding recipients (sample from the funding data) was modelled in the building model for the evaluation serving as the basis for further calculations.
- Savings for each case are derived from the consumption of the building before the refurbishment minus the consumption after refurbishment.

Following this methodology, the average result of primary energy demand savings on average exceeds 60% (Evidence No. 2), thereby achieving the medium-depth renovation level as defined in Commission Recommendation (EU) 2019/786 on Building Renovation.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 50 Project results and Chief Data Scientists or Chief Data Officers and data laboratories

Related Measure: 2.1.1 Innovative data policy for Germany

Qualitative Indicator: Project results and Chief Data Scientists or Chief Data Officers and data laboratories

Time: Q1 2026

1. Context:

The objectives of the measure are to increase data literacy in government, science and society and to foster the sharing and use of data. The measure consists of Chief Data Scientists or Chief Data Officers and data laboratories in the federal administration, as well as supporting projects or research on data intermediaries, the depersonalisation or anonymisation of data, and data literacy.

Milestone 50 requires that: (i) at least one software tool or library supporting the research-based testing of data intermediaries has been made publicly available via public repository or public webpage; (ii) project results on the depersonalisation or anonymisation of data have been published in at least one peer-reviewed scientific publication; (iii) a platform for data literacy in science has been published on a public webpage; (iv) a toolbox, i.e. a freely usable digital platform with tools for working with data (e.g. coding environment and tutorials), for data literacy has been published on a public webpage; (v) at least 15 federal ministries and the federal chancellery shall have a Chief Data Scientist or Chief Data Officer and a data laboratory.

Milestone 50 is the second and last milestone of the reform. It follows the completion of milestone 49, related to the start of all projects and activities of the measure and, where relevant, the completion of selection procedures and start of the selected projects.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the milestone (including all its constitutive elements, as set out in the description of the milestone and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Funding guidelines for pilot projects for developing and practical testing of data diffusion models	Guidelines for the funding of research-based testing of data intermediaries, issued by the Federal Ministry of Education and Research and published in the Federal Gazette (*Bundesanzeiger*) on 8 January 2021. These guidelines provide the framework for funding the project KickStartTrustee (see below).
3	Link to the KickStartTrustee main webpage	The KickStartTrustee main webpage presents the KickStartTrustee data diffusion model project. It is publicly available at https://www.kickstarttrustee.de (link verified by Commission services on 6 May 2026).
4	Link to the KickStartTrustee GitHub Pages webpage	The KickStartTrustee webpage hosted via GitHub Pages supports the conception and implementation of data trustees through guidance, lessons and tools. The documentation covers the KickStartTrustee Platform, an example software implementation of a data intermediary. The webpage is publicly available at https://fraunhofer-iese.github.io/KickStartTrustee (link verified by Commission services on 6 May 2026).

		It includes a 'Demonstrator Guide' providing step-by-step instructions for reproducing example data exchanges through the KickStartTrustee Platform, including obtaining the data's owner consent and providing and retrieving data. The guide is publicly available at https://fraunhofer-iese.github.io/KickStartTrustee/Konzeption%20und%20Umsetzung/Beispielhafte%20Implementierung%20DTH-Plattform/Demonstrator%20Guide/ (link verified by Commission services on 6 May 2026).
5	Link to the KickStartTrustee GitHub	The KickStartTrustee GitHub contains the documentation underlying the KickStartTrustee GitHub Pages webpage, as well as additional software ressources. It is publicly available at https://github.com/Fraunhofer-IESE/KickStartTrustee (link verified by Commission services on 6 May 2026). These include a prepared set of requests for testing data exchanges through the KickStartTrustee Platform. The requests are supplied as a "Postman collection". Postman is the application used to send these requests to the platform and inspect its responses. The Demonstrator Guide in Evidence No. 4 explains how to use the collection to reproduce the documented data-exchange scenario through the KickStartTrustee Platform. The Postman collection is publicly available at https://github.com/Fraunhofer-IESE/KickStartTrustee/blob/example-farming-trustee/src/example/kst-agricultural-service-provider/postman/KST%20Agricultural%20Service%20Provider%20Use%20Case.postman_collection.json (link verified by Commission services on 6 May 2026)
6	Funding guidelines for a research network for anonymisation and safe data use	The funding guideline for projects on the depersonalisation and anonymisation of data, issued by the Federal Ministry of Education and Research and published in the Federal Gazette (*Bundesanzeiger*) on 9 December 2021. It provides the framework for funding the project AnoMed (see below).
7	Copy of the scientific publication "S-BDT: Distributed Differentially Private Boosted Decision Trees"	The paper "S-BDT: Distributed Differentially Private Boosted Decision Trees" was published on 9 December 2024 in the Proceedings of the 2024 ACM SIGSAC Conference on Computer and Communications Security (CCS '24), and relates to anonymisation of data. It is publicly available at https://doi.org/10.1145/3658644.3690301 (link verified by Commission services on 6 May 2026).
8	Link to the official ACM CCS 2024 Call for Papers.	The official Call for Papers for the 2024 ACM SIGSAC Conference on Computer and Communications Security (CCS '24) describes the conference's peer-review process. It is publicly available at https://www.sigsac.org/ccs/CCS2024/call-for/call-for-papers.html (link verified by Commission services on 6 May 2026). It states that submitted papers are reviewed by Program Committee members. It also contains a dedicated "Policy for Peer-Review Integrity" and specifies that accepted papers are published in the conference proceedings. The Call for Papers also explicitly refers

		to a "published scientific paper" in the context of papers and their associated artifacts. This confirms that papers published in the CCS '24 proceedings are scientific publications subject to peer review.
9	Funding guidelines for projects to develop data literacy in different field of science	The funding guidelines for projects to develop data literacy in science, published in the Federal Gazette (*Bundesanzeiger*) on 21 June 2022. It provides the framework for funding the platform DALIA (see below).
10	Link to the DALIA platform	DALIA is a platform that promotes the teaching of data literacy. It is publicly available at https://dalia.education/de (link verified by Commission services on 6 May 2026).
11	Grant decision for the project "Data Literacy Toolbox – TBDK", subproject "Development of a digital, data tool-centred learning and competence platform for the widespread development of data literacy and basic data skills" (*Verbundprojekt: Toolbox Datenkompetenz-TBDK; Teilvorhaben: Entwicklung einer digitalen Datentool-zentrierten Lern- und Kompetenzplattform zur flächendeckenden Vermittlung von Data Literacy und grundlegender Datenkompetenz*)	Grant decision, issued by the Federal Ministry for Education and Research and dated 9 December 2021 for the Data Literacy Toolbox collaborative project, concerning the development of a digital data tool-centric learning and competence platform for the widespread development of data literacy and basic data skills.
12	Grant decision for the project "Data Literacy Toolbox – TBDK", subproject "Scientifically supported needs analysis and requirements management based on the Design-Based Research model for the development of a data tool-centred learning and competence platform" (*Verbundprojekt: Toolbox Datenkompetenz - TBDK; Teilvorhaben: Wissenschaftlich begleitende Bedarfsanalyse und Anforderungsmanagement auf Basis des Design-Based*	Grant decision, issued by the Federal Ministry for Education and Research and dated 9 December 2021 for the Data Literacy Toolbox collaborative project, concerning needs assessment and requirements management for the development of a data tool-centric learning and competence platform.

	Research-Modells zur Entwicklung einer Datentool-zentrierten Lern- und Kompetenzplattform)	
13	Link to the Toolbox Datenkompetenz webpage	The Toolbox Datenkompetenz webpage gives access to a structured digital platform providing concrete tools for working with data. It is publicly available at https://beta.toolboxdatenkompetenz.de (link verified by Commission services on 6 May 2026).
14	List of federal ministries and the Federal Chancellery	List of the federal ministries and the Federal Chancellery for which Germany provided evidence. The document identifies the relevant Chief Data Scientist or Chief Data Officer for each ministry, including their name, whether they work in a data laboratory, and whether they head the section in which the data laboratory is located.
15	Business distribution plans (*Geschäftsverteilungspläne*, "GVPls")	For each of the 15 federal ministries and for the Federal Chancellery, Germany provided a business distribution plan (*Geschäftsverteilungsplan*, "GVPl"). A GVPl is an internal organisational and work allocation plan used by German public administrations. It sets out how responsibilities are distributed within the relevant ministry or organisational unit by listing the tasks assigned to that unit and identifying the officials responsible for carrying them out.
16	Organisational charts of the federal ministries and the Federal Chancellery	Organisational charts for the 15 federal ministries and the Federal Chancellery. Each organisational chart provides a visual representation of the internal structure of a ministry, showing its organisational units, their hierarchical relationships, and the officials responsible for them.
17	Brochure about the Federal Government's data laboratories	Brochure published in November 2025 by the Federal Ministry for Digital Transformation and Government Modernisation, presenting the Federal Government's data laboratories and selected applications developed by them.
18	Brochure about the demo day of the data laboratories	Brochure published in October 2025 by the Federal Ministry for Digital Transformation and Government Modernisation, accompanying the demonstration day of the data laboratories which shows selected applications developed by them.
19	Business distribution plan (*Geschäftsverteilungsplan*, "GVPl") for Unit CIT I 5 of the Federal Ministry of Defence (hereinafter "BMVg")	This document is the GVPl for Unit CIT I 5, dated January 2020, and shows that a Chief Data Officer was already in place within the Federal Ministry of Defence before February 2020, while no responsibilities for data labs or the CDO Council existed.
20	Data Strategy of the Federal Government	Strategy document outlining the ambition to establish data laboratories in all ministries. It was adopted by the Federal Cabinet on 27 January 2021.
21	Concept paper for the role of the Chief Data Officer (CDO) and data laboratories in the BMVg	This document is prepared by the BMVg unit CIT I 5, dated 18 August 2021, setting out the framework for the Chief Data Officer (CDO) role and data laboratories within the BMVg. It makes the CDO responsible for steering the establishment of data laboratories, supported by the Data Governance Office Bw (DGO Bw) and envisages a network of data laboratories under the

		central steering of the CDO rather than a single central data lab.
22	Decision expanding the responsibilities of unit CIT I 5 of the BMVg	Decision by the director-general Cyber and IT of the BMVg to confer the task 'data lab' to the unit CIT I 5. It is dated 15 September 2022 and was approved on 21 September 2022.
23	Business distribution plan (*Geschäftsverteilungsplan*, "GVPl") for BMVg, dated August 2026	The GVPl for Unit IC II 6, dated August 2026, shows that the unit is responsible for data labs and explicitly refers to the CDO Council GB BMVg, and therefore demonstrates that a CDO Council is in place within the BMVg.
24	Minutes of the first CDO Council meeting of 16 November 2021	The document contains the minutes of the first CDO Council meeting, held on 16 November 2021, showing that the CDO Council has been established and is effectively operational. It also links the creation and role of the CDO Council to the implementation of the BMVg Data Strategy, as the Council is described as the kick-off for its implementation.
25	Command Directive No. 001/2022 of the Cyber and Information Domain Command (KdoCIR) on the Establishment of the Bundeswehr Data Governance Office (DGO Bw)	This document, signed on 17 May 2022, provides for the establishment of the Bundeswehr Data Governance Office (DGO Bw).
26	Appendix 3 to Organisational Instruction 00000006/2026(CIR) on the DGO Bw Secretariat	The document, dated 19 December 2025, identifies the DGO Bw Secretariat as a formal organisational element within the Cyber and Information Space Command (KdoCIR), with its own organisational element number (30421008). It therefore provides evidence that the DGO Bw has been formally established within the BMVg organisational structure.
27	BMVg General Regulation on Data Governance	This document is the BMVg General Regulation "Data Governance" (A1-940/0-4583), issued by the Bundeswehr Data Governance Office (DGO Bw) and dated 18 March 2026. It lays down the organisation, responsibilities and implementation of Data Governance within the BMVg. Section 3.2.3 states that the DGO Bw is responsible for the operational implementation of the strategic goals of the CDO, while Section 3.3.1 defines the role of the CDO Council as the CDO's coordination instrument.

3. Analysis:

The justification and substantiating evidence provided by the Germany authorities cover all constitutive elements of the milestone.

(i) At least one software tool or library supporting the research-based testing of data intermediaries has been made publicly available via public repository or public webpage

Germany provided the funding guidelines (Evidence No. 1) for projects about research-based testing of data intermediaries. During the assessment of the previous milestone M49, the Commission services verified that the project KickStartTrustee received a grant under these funding guidelines.

Germany provided links to three webpages as evidence (Evidence No. 3-5).

The KickStartTrustee main webpage presents the KickStartTrustee project (Evidence No. 3). The webpage explains the role of data trustees as trusted intermediaries between data providers and data users and states that the project aims to provide a public guide for implementing such data trustees, including concepts, methods and tools covering the different phases from vision to operation. The resources developed under the project are made publicly available through both a dedicated public webpage (Evidence No. 4) and a public repository (Evidence No. 5).

The KickStartTrustee webpage hosted via GitHub Pages (Evidence No. 4) is openly accessible and provides a structured library of guidance and resources for the conception and implementation of data trustees, which correspond to data intermediaries. In particular, the "Demonstrator Guide" gives step-by-step instructions for a scenario in which two service providers request the data owner's consent and then provide and retrieve data through the platform. These instructions support testing by enabling users to reproduce an example of data intermediation and examine how consent and data sharing operate. The KickStartTrustee webpage also contains a dedicated Security Testing Guide, which provides testing criteria for data trustees and is based on recognised web security testing methodology, including the OWASP Web Security Testing Guide.

The webpage links to the corresponding public GitHub repository (Evidence No. 5), which contains the documentation underlying that webpage, together with additional software resources. GitHub serves as the project's public repository, hosting documentation and software files that users can freely access and download. These include the requests needed to carry out the scenario described above. The requests are supplied as a "Postman collection", which users open in Postman, an application for sending requests to a system and inspecting its responses. Following the Demonstrator Guide, users can execute the requests as part of a scenario involving consent and data exchanges through the intermediary. The webpage and repository therefore support the testing of data intermediaries by providing both instructions for reproducing a test scenario and the software requests needed to carry it out.

The Commission services accessed the links provided by the authorities on 6 May 2026 and verified that the library and software tool described above were publicly available via the public webpage and repository and supported the testing of data intermediaries, in particular by providing both instructions for reproducing a test scenario and the software requests needed to carry it out. This check was completed successfully, confirming that at least one software tool or library supporting the research-based testing of data intermediaries has been made publicly available via public repository or public webpage.

(ii) Project results on the depersonalisation or anonymisation of data have been published in at least one peer-reviewed scientific publication

Germany provided the funding guidelines (Evidence No. 6) for projects on the depersonalisation and anonymisation of data. During the assessment of the previous milestone M49, the Commission services verified that the project AnoMed received a grant under these funding guidelines.

Germany provided as evidence a copy of the scientific publication entitled "S-BDT: Distributed Differentially Private Boosted Decision Trees", published on 9 December 2024, as well as a link to the publication (Evidence No. 7). The paper was published in the Proceedings of the 2024 ACM SIGSAC Conference on Computer and Communications Security (CCS '24). According to the official CCS '24 Call for Papers, papers published in the proceedings are subject to a peer-review process, and the Call for Papers explicitly refers to such publications as scientific papers (Evidence No. 8). The paper therefore qualifies as a peer-reviewed scientific publication. The publication concerns project results

on the anonymisation of data, as it presents a privacy-preserving method designed to protect individual data when it is used to train machine-learning models and to reduce the risk that information about specific individuals can be inferred from the training data.

Its project-related nature is supported by the acknowledgements section of the paper, which states that the research received funding from the 'BMBF' (*Bundesministerium für Bildung und Forschung*, Federal Ministry of Education and Research) under the AnoMed project, among others.

The Commission services accessed the link provided by the authorities (Evidence No. 7) on 6 May 2026 to verify that the scientific paper had been published. This check was completed successfully, confirming that the project results on the depersonalisation or anonymisation of data have been published in at least one peer-reviewed scientific publication.

(iii) A platform for data literacy in science has been published on a public webpage

Germany provided the funding guidelines (Evidence No. 9) for projects to develop data literacy in science. During the assessment of the previous milestone M49, the Commission services verified that the project DALIA received a grant under these funding guidelines.

Germany provided as evidence a link to the DALIA webpage (Evidence No. 10). The Commission services accessed the links provided by the authorities on 6 May 2026 to verify that the webpage is publicly accessible and gives access to a dedicated search portal for teaching and learning materials, as well as that the platform is focused on data literacy, as it provides curated open teaching and learning materials aimed at helping users collect, analyse, critically assess and use data according to FAIR (Findable, Accessible, Interoperable, and Reusable) principles. Its link with science is established by its focus on research data, its role as a knowledge base for FAIR data usage and supply, and its connection with the German National Research Data Infrastructure (NFDI). This check was completed successfully, confirming that a platform for data literacy in science has been published on a public webpage.

(iv) A toolbox, i.e. a freely usable digital platform with tools for working with data (e.g. coding environment and tutorials), for data literacy has been published on a public webpage

Germany provided two grant decisions for the collaborative project "Data Literacy Toolbox – TBDK" (Evidence No. 11-12). One grant decision (Evidence No. 11) concerns the subproject implemented by StackFuel GmbH and identifies its purpose as the development of a digital, data tool-centric learning and competence platform for the comprehensive communication of data literacy and basic data skills. The second grant decision (Evidence No. 12) concerns the subproject implemented by the Institute of Applied Informatics and covers the accompanying needs assessment and requirements management for the development of the same data tool-centric learning and competence platform. During the assessment of the previous milestone M49, the Commission services verified that the project Data Literacy Toolbox – TBDK is part of the RRF measure 2.1.1.

Germany provided as evidence a link to the Toolbox Data Literacy (*Datenkompetenz*) webpage (Evidence No. 13). The Commission services accessed the link provided by the authorities on 6 May 2026 to verify that a toolbox for data literacy had been published on a public webpage. This check was completed successfully.

The Toolbox *Datenkompetenz* webpage is publicly available and provides access to a structured digital platform providing tools for working with data through several functional sections. The Trainings section gives access to trainings and courses in various fields related to working with data, including data analysis, data science, programming, artificial intelligence and data ethics. The

Datasets section gives access to datasets that can be downloaded or opened in a workspace, allowing users to practice what they have learned or to carry out their own data-related projects. The My Workspace function provides a coding environment, enabling users to work with data directly on the platform. Access to the trainings and workspace requires the creation of an account, but the Commission services verified that registration is free and straightforward. Datasets can either be downloaded without an account or accessed with an account. The toolbox is aimed at data literacy, as its content and functions enable users to develop practical skills to access, understand, process, analyse, interpret and use data. This is demonstrated by the combination of training materials, datasets, and coding workspace.

(v) At least 15 federal ministries and the federal chancellery shall have a Chief Data Scientist or Chief Data Officer and a data laboratory

Germany provided a list of the federal ministries and the Federal Chancellery for which evidence has been submitted (Evidence No. 14). The list covers 15 federal ministries and the Federal Chancellery, namely:

i. the Federal Foreign Office (*Auswärtiges Amt*, "AA")
ii. the Federal Chancellery (*Bundeskanzleramt*, "BKAmt")
iii. the Federal Ministry of Labor and Social Affairs, (*Bundesministerium für Arbeit und Soziales*, "BMAS")
iv. the Federal Ministry for Education, Family Aiffairs, Senior Citizens, Women and Youth (*Bundesministeriums für Bildung, Familie, Senioren, Frauen und Jugend*, "BMBFSFJ")
v. the Federal Ministry of Agriculture, Food and Regional Identity (*Bundesministerium für Landwirtschaft, Ernährung und Heimat*, "BMLEH")
vi. the Federal Ministry of Finance (*Bundesfinanzministerium*, "BMF")
vii. the Federal Ministry of Research Technology and Space (*Bundesministerium für Forschung, Technologie und Raumfahrt*, "BMFTR")
viii. the Federal Ministry of Health (*Bundesministerium für Gesundheit*, "BMG")
ix. the Federal Ministry of the Interior (*Bundesministeriums des Innern*, "BMI")
x. the Federal Ministry of Justice and Consumer Protection (*Bundesministerium der Justiz und für Verbraucherschutz*, "BMJV")
xi. the Federal Ministry for the Environment, Climate Action, Nature Conservation and Nuclear Safety (*Bundesministerium für Umwelt, Klimaschutz, Naturschutz und nukleare Sicherheit*, "BMUKN")
xii. the Federal Ministry of Transport (*Bundesministerium für Verkehr*, "BMV")
xiii. the Federal Ministry of Defence (*Bundesministeriums der Verteidigung*, "BMVg")
xiv. the Federal Ministry for Economic Affairs and Energy (*Bundesministerium für Wirtschaft und Energie*, "BMWE")
xv. the Federal Ministry for Housing, Urban Development and Building (*Bundesministerium für Wohnen, Stadtentwicklung und Bauwesen*, "BMWSB")
xvi. the Federal Ministry for Economic Cooperation and Development (*Bundesministerium für wirtschaftliche Zusammenarbeit und Entwicklung*, "BMZ").

The list also indicates, for each federal ministry and the Federal Chancellery, the name of the Chief Data Scientist (hereinafter "CDS") or Chief Data Officer (hereinafter "CDO"), the location of the data laboratory in the organisational set-up, whether the CDS or CDO works in that data laboratory, and whether the CDS or CDO is the head of the section in which the data laboratory is located.

For each of the 15 federal ministries and for the Federal Chancellery, Germany provided a business distribution plan (*Geschäftsverteilungsplan*, "GVPl") (Evidence No. 15). A GVPl is an official internal organisational and work allocation plan used by German public administrations. It sets out how responsibilities are distributed within the relevant ministry or organisational unit by listing the tasks assigned to that unit and identifying the officials responsible for carrying them out. The GVPls identify either a CDS for certain ministries (AA, BMLEH, BMFTR, BMI, BMJV, BMV, BMWE, BMZ), a CDO for others (BKAmt, BMAS, BMBFSFJ, BMG, BMUKN, BMVg), or both a CDS and a CDO (BMF, BMWSB). These GVPls also identify a data laboratory.

Germany also provided organisational charts for the federal ministries and the Federal Chancellery (Evidence No. 16). An organisational chart provides a visual representation of the internal structure of a ministry, showing its organisational units, their hierarchical relationships, and the officials responsible for them. These organisational charts further corroborate the presence of data laboratories within the respective ministries and the Federal Chancellery.

In addition, Germany provided a brochure (Evidence No. 17) presenting the Federal Government's data laboratories and selected applications developed by them. It also provided another brochure (Evidence No. 18) from the demonstration day of the data laboratories. Both brochures show concrete examples including images of applications developed by these data laboratories, thereby further supporting their existence and operational activity. Together they cover at least one data laboratory in all 15 federal ministries and the federal chancellery.

Data lab in the Federal Ministry of Defence (hereinafter "BMVg")

It should be noted that the BMVg has a specific organisational set-up. Germany provided a concept paper from August 2021 concerning the role of CDO and data laboratories within the BMVg (Evidence No. 21). The concept paper explains that the BMVg relies on several data laboratories instead of a single data laboratory, because the BMVg manages numerous heterogeneous data spaces with different information-security requirements.

The Commission services verified that the BMVg has at least one active data laboratory, namely the unit responsible for the coordination of the data laboratory network, which was initially called CIT I 5 and reclassified during later reorganisations as IC II 7 and subsequently IC II 6.

Germany provided the GVPl of unit CIT I 5 from January 2020, which did not include any data lab tasks at that time (Evidence No. 19). Germany provided a decision by the director-general Cyber and IT, hereinafter referred to as "the decision by the director-general Cyber and IT", to confer the task 'data lab' to unit CIT I 5 in September 2021 (Evidence No. 22). The GVPl of its successor unit IC II 6 in August 2026 shows that its head of unit now has responsibility for data labs (Evidence No. 23).

The Council Implementing Decision states that "at least 15 federal ministries… shall have… a data laboratory." Page 33 of the German RRP and page 63 of the Federal Government's Data Strategy (Evidence No. 20) provide in the section on data labs that the BMVg should establish a data governance to establish a value-oriented approach to data and achieve a data-centered organisational culture. In light of a purposive interpretation of this requirement from the Council Implementing Decision, it is interpreted that a data laboratory does not need to officially be called data laboratory, provided that it performs the functions described above. Unit IC II 6 is called 'Digitalisation Ministry of Defence; Artificial Intelligence and Data Governance' (*Digitalisierung GB BMVg; Künstliche Intelligenz und* Data Governance). However, the responsibilities assigned to the unit in the decision by the director-general Cyber and IT and the GVPl are consistent with those of a data lab set out in the German RRP and the Federal Government's Data Strategy. According to the

decision by the director-general Cyber and IT, the unit works on an additional value-oriented use of data within the ministry (paragraph 2) and durable data governance (paragraph 3), and the decision to confer responsibility for the BMVg's data labs is motivated by the need to coordinate data lab activities centrally within one unit (paragraph 8). In addition, the GVPl shows that employees of the unit work on data governance and the development of a data culture. Therefore, the unit functions as a data lab and fulfils the original ambition of the RRF measure. On this basis, it is considered that this constitutive element of the milestone is satisfactorily fulfilled.

CDO in the BMVg

The BMVg's CDO was already in place before February 2020, but without the support of a CDO Council, as shown in the GVPl of the supporting unit CIT I 5 (Evidence No. 19). After February 2020, the BMVg expanded the CDO's supporting structures and capacities by establishing the CDO Council and the Data Governance Office Bundeswehr (DGO Bw) to support the performance of the CDO's tasks.

Germany provided the minutes of the first CDO Council meeting, held on 16 November 2021, which demonstrate that the Council has been established and is effectively operational (Evidence No. 24). The BMVg General Regulation on Data Governance, hereinafter referred to as "the Regulation on Data Governance" stipulates that the CDO Council is the coordination instrument of the CDO (Evidence No. 27, paragraph 330). According to section 3.2.2 of the Regulation on Data Governance, the CDO Council is supported by the CDO Office within unit IC II 7 (now called unit IC II 6). The GVPl for unit IC II 6 explicitly refers to its task to support the CDO Council (Evidence No. 23).

Germany provided the Command Directive No. 001/2022 of the Cyber and Information Domain Command (KdoCIR), signed 17 May 2022, to establish the Bundeswehr Data Governance Office (DGO Bw) (Evidence No. 25). Germany also provided Appendix 3 to Organisational Instruction 00000006/2026(CIR), dated 19 December 2025, which identifies the DGO Bw Secretariat as a formal organisational element, and thereby demonstrates that the DGO Bw is formally established (Evidence No. 26). According to the Regulation on Data Governance, the DGO Bw is responsible for the operational implementation of the strategic goals of the CDO (Evidence No. 27, paragraph 311).

The evidence provided by Germany demonstrates that the Council Implementing Decision requirement for the BMVg to have a CDS or CDO is met, with the CDO's capacity having been reinforced since February 2020 through the establishment of the CDO Council and the DGO Bw.

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 54 Budget execution – disbursement of at least EUR 1 275 000 000

Related Measure: 2.1.2 IPCEI Microelectronics and Communication Technologies

Quantitative Indicator: EUR Million

Baseline: 0

Target: 1 275

Time: Q2 2026

1. Context:

The objective of the measure is to contribute to a cross-border initiative aiming at endowing the European Union with capabilities in the next generation of low power trusted processors and other electronic components. The investment consists of providing support to German participants in projects to be implemented as part of an Important Project of Common European Interest (IPCEI).

Target 54 requires that at least EUR 1 425 000 000 have been committed (through signatures of grant decisions) and at least EUR 1 275 000 000 have been disbursed.

Target 54 is the third and last milestone or target of the investment. It follows the completion of milestone 52, related to the national call for expression of interest for the IPCEI, and target 53, related to the launch of the first projects.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	de-2-1-2-t54-evidence-no-1-list-of-projects-and-payments-pt	Document providing information about the projects supported by Germany within this measure, including grant decisions (official reference including a link to Commission State aid award page, signature date), information about participants (names) and their projects (brief description, committed budget) as well as details on disbursements (recipient, dates and values).
3	Grant decisions	27 grant decisions (*Zuwendungsbescheid*), each awarding a grant to a German IPCEI participant. They are issued by the German Federal Ministry of Economic Affairs and Climate Protection (as it was called at the time, it has since been renamed Federal Ministry of Economic Affairs and Energy). They are dated and signed electronically.
4	Partial revocation of grant decision for TRUMPF Photonic Components GmbH	Partial revocation of the grant decision for IPCEI participant TRUMPF Photonic Components GmbH, in which the grant amount is reduced. It is issued by the Federal Ministry of Economic Affairs and Energy. It is dated 29 July 2025 and signed electronically.
5	Proofs of payment	60 proofs of payment (*Zahlungsdokumentation*) for the 60 individual payments randomly selected by the Commission as a sample. They are generated by the Federal Ministry of Economic Affairs and Energy IT system and include a payment date (*Buchungsdatum*) and date(s) of the signature(s) of the =official(s)

		who approved the payment in the system.
6	De-2-1-2-t54-evidence-no-4-call-for-application	Communication from the then Federal Ministry of Economic Affairs and Climate Protection calling for applications for participation in the IPCEI. It was published in the Federal Gazette on 1 September 2021.

3. Analysis:

The justification and substantiating evidence provided by the Germany authorities cover all constitutive elements of the target.

(i) At least (i) EUR 1 425 000 000 have been committed (through signatures of grant decisions)

Germany provided a list of 27 participants in the IPCEI Microelectronics and Communication Technologies (Evidence No. 2). For each project participant, the list includes the date of signature of the grant decision, the total grant amount committed, a link to the webpage of the European Commission displaying the State aid grant including the official reference, the disbursements by year and total disbursements, and a description of the project.

The grant commitments for the 27 partners add up to EUR 3 216 776 141, thereby exceeding the target of EUR 1 425 000 000 by EUR 1 791 776 141.

Germany provided the grant decisions for all 27 IPCEI partners (Evidence No. 3). The Commission services verified for each grant decision that:

- The project (participant) for which the grant is issued corresponds to the information in the list.
- The grant is for a project to be implemented as part of the IPCEI Microelectronics and Communication Technologies.
- The project participant is registered in Germany according to its address in the grant decision.
- The project participant is German according to the State aid award page of the Commission.
- The grant decision was adopted during the eligibility period of the RRF (1 February 2020 to 31 August 2026).
- The grant commitment amount in the grant decision corresponds to the information provided in the list (for the IPCEI partner TRUMPF Photonic Components GmbH, the Commission verified that the grant amount corresponds to the information provided in the partial revocation of the grant decision (Evidence No. 4) in which the grant amount was reduced).

The Council Implementing Decision required that the money be committed through signatures of grant decisions. The grant decisions Germany provided do not bear a signature. Whilst this constitutes a minimal formal deviation from the requirement of the Council Implementing Decision, each decision expressly states that it was issued electronically and no signature is required. The absence of a signature results from the procedure used for the electronic issuance of the grant decisions and does not affect the commitment of the funding through those decisions. The grant decisions specify the beneficiary, the project concerned and the amount of funding awarded. As such, this minimal deviation does not affect the progress towards achieving the investment that the

target represents. On this basis, it is considered that this constitutive element of the target is satisfactorily fulfilled.

(ii) at least EUR 1 275 000 000 have been disbursed.

The aforementioned list identifies 199 disbursements to the IPCEI partners. The sheet shows the recipient's name and the payment date and amount of each disbursement.

According to column C, the total of the disbursements adds up to EUR 1 552 099 752.45, thereby exceeding the target of EUR 1 275 000 000 by EUR 277 099 752.45.

Following the selection of a random sample of 60 units (disbursements), Germany submitted a proof of payment (Evidence No. 5) for each item in the sample. For each of the 60 units, the Commission services verified that:

- The project (participant) which the payment is made to corresponds to the information in the spreadsheet.
- The payment date falls in the eligibility period of the RRF of 1 February 2020 to 31 August 2026.
- The payment amount corresponds to the information in the spreadsheet.

The evidence provided for the sample of 60 units therefore confirmed that the requirement of disbursing EUR 1 275 000 000 has been met. On this basis, it is considered that this constitutive element of the target is satisfactorily fulfilled.

Furthermore, in line with the description of the measure, the investment consists of
i) providing financial support to German participants

Germany provided grant decisions (*Zuwendungsbescheid*) for all the participants (Evidence No. 3) and proof of payment to IPCEI's partners (evidence 5), thereby demonstrating financial support.

Germany provided the call for expressions of interest for the IPCEI Microelectronics (Evidence No. 6), which specifies this requirement on page 2 in section 3, stating that recipients must be companies with headquarters or a branch registered in Germany. The Commission verified that all recipients have a registered office in Germany using the common register portal of the German federal states (handelsregister.de).

ii) in projects to be implemented as part of an Important Project of Common European Interest (IPCEI).

Each grant decision demonstrates that the funding concerns a specific project (*Vorhaben*), identified by a project title, an individual funding reference, a grant period and a dedicated grant amount. The grant is earmarked exclusively for the implementation of that project. The grant decisions include a funding ID starting with the code "16IPC", identifies that the funding is granted as part of an IPCEI. On this basis, it is considered that the financial support is provided for projects implemented as part of an Important Project of Common European Interest (IPCEI).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 56 Open-source repositories or other web resources containing code

Related Measure: 2.1.3 IPCEI Next Generation Cloud Infrastructure and Services (IPCEI CIS)

Quantitative Indicator: Repositories

Baseline: 0

Target: 35

Time: Q2 2026

1. Context:

The objective of the measure is to contribute to a large-scale cross-border initiative on smart cloud and edge solutions. The investment consists of providing financial support to German participants in projects to be implemented as part of an Important Project of Common European Interest (IPCEI).

Target 56 requires that 3 direct and 8 indirect partners have set up open-source repositories or other freely accessible web resources containing code, and that at least 35 of these repositories or web resources have received at least 350 commits each.

Target 56 is the second and final milestone or target of the investment. It follows the completion of milestone 55, which required the grant decisions to be signed for all R&D&I projects covered by the IPCEI State aid decision, and the selection criteria to ensure that more than 50% of these projects address energy efficiency as one of their key priorities and comply with the European Code of Conduct on Data Centre Energy Efficiency.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	U1-DE 2.1.3. Evidence No. 2 (project overview)"	Spreadsheet prepared by Germany, dated 9 June 2026, containing the sheets: "Number of contributing projects", which lists the German direct and indirect partners to IPCEI-CIS and provides the link to the open-source repository or other freely accessible web resource set up; and "Repositories > 350 commits", which lists 36 repositories that have received at least 350 commits.
3	Commission Decision C(2023) 8552 final of 5 December 2023	Commission Decision of 5 December 2023 identifying direct and indirect partners participating in the Important Project of Common European Interest on Next Generation Cloud Infrastructure and Services (IPCEI-CIS).
4	Grant decisions (*Zuwendungsbescheide*) for direct partners	3 grant decisions awarded to the direct German participants in the IPCEI-CIS contributing towards the target. They are issued by the *VDI Technologiezentrum*, the project implementing agency for the German Ministry of Economic Affairs and Climate Protection (as it was called at the time, it has since been renamed Federal Ministry of Economic Affairs and Energy). They are dated 12 December 2023 (for SAP and Siemens) and 13 December 2023 (for Deutsche Telekom) and signed electronically.

5	Grant decisions (*Zuwendungsbescheide*) for indirect partners	10 grant decisions awarded to the indirect German participants in the IPCEI-CIS contributing towards the target. They are issued by the *VDI Technologiezentrum*, the project implementing agency for the then German Ministry of Economic Affairs and Climate Protection. They are dated between 28 April 2023 and 30 January 2026 and signed electronically.
6	How-to guide	How-to guide prepared by Germany for target 56 to facilitate verification of the eligibility of GitHub repositories under IPCEI-CIS. The document describes where to find funding information on the repository page, as well as the start date of the repository and the number of commits on GitHub.
7	Proofs of payment	13 proofs of payment (*Zahlungsdokumentation*) to the direct and indirect German participants in the IPCEI-CIS contributing towards the target. They are generated by the Federal Ministry of Economic Affairs and Energy IT system and include a payment date (*Buchungsdatum*) and date(s) of the signature(s) of the official(s) who approved the payment in the system. They are dated between 9 December 2025 and 27 August 2026.
8	Funding guidelines for the IPCEI CIS	Communication from the German Ministry of Economic Affairs and Energy setting out the funding guidelines for the IPCEI. It was officially adopted on 31 May 2023 and published in the Federal Gazette on 16 June 2023.
9	Founding rules (*Grundordnung*) of the University for Applied Sciences Dortmund	The (revised) founding rules for the University for Applied Sciences Dortmund, published on 08 May 2023. They are available at: https://www.fh-dortmund.de/medien/hochschule/gesetze-verordnungen-erlasse/055_Neubekanntmachung_Grundordnung-der-FH_05.2023.pdf

3. Analysis:

The justification and substantiating evidence provided by the Germany authorities cover all constitutive elements of the target.

3 direct and 8 indirect partners have set up open-source repositories or other freely accessible web resources containing code.

Germany provided a list (Evidence No. 2) of three direct partners and 10 indirect partners, in line with the Commission Decision concerning the "Important Project of Common European Interest on Next Generation Cloud (ICPEI_CIS) – RRF", hereinafter referred to as the Commission Decision (Evidence No. 3).

Section 2.3.3 of the Commission Decision describes the direct participants in the IPCEI-CIS, including the three direct partners counted by Germany: Deutsche Telekom AG (paragraph 46), SAP SE (paragraph 56) and Siemens AG (paragraph 57).

Germany provided a grant decision for each direct partner (Evidence No. 4), issued by the VDI Technologiecentrum on behalf of the German Ministry for Economic Affairs and Climate Protection.

Annex II of the Commission Decision identifies four of the 10 indirect partners reported in the list of indirect partners provided by Germany. These are the indirect partners whose grant had been allocated by the time of the Commission Decision December 2023: University for Applied Science (*Fachhochschule*) Dortmund, IONOS SE, Secunet Security Networks AG and SYSGO GmbH. The other

six indirect partners were allocated their grant after the Commission Decision and are consequently not explicitly mentioned in it. They are Amadeus GmbH, Schunk SE & Co. KG, eco - Verband der Internetwirtschaft e.V., Siemens Energy Global GmbH & Co. KG, HOCHTIEF Engineering GmbH and AKI GmbH. According to paragraph 61 of the Commission Decision, indirect partners are selected at national level by the relevant Member State and their funding does not need to be notified to, examined or approved by the Commission in that Decision. Therefore, the Decision must not be treated as the sole evidence for identifying all nationally funded indirect partners.

For all 10 indirect partners, Germany provided grant decisions (Evidence No. 5) issued by the VDI Technologiecentrum on behalf of the German Ministry for Economic Affairs and Climate Protection, showing that they were selected for funding under the IPCEI-CIS.

Open-source repositories are internet pages on a server for publishing code that is open-source, meaning that it is made freely available to use, modify and distribute, enabling an online community to develop code together. Other freely accessible web resources containing code refers to a website which also contains code that is free to use, but cannot be modified by users in the same way. The German authorities provided one URL link for each relevant partner to a repository or web resource, showing that 12 partners have set up open-source repositories and one partner (Siemens AG) has set up another freely accessible web resource containing code.

The Commission services accessed all aforementioned links on 9 and 10 July 2026 and verified that these links correspond to an open-source repository or another freely accessible web resource that contains code. For the open-source repositories, the Commission services verified that it could access the published code for free and without access restrictions and that internet users have been modifying the code through ‘commits’, which was visible on the repository web page itself (see analysis of second target requirement below). For the freely accessible web resource, it verified that it could access the published code for free and without access restrictions.

For each repository and the web resource, the Commission services also verified that it had been set up by the partner indicated in the list provided by the German authorities. All 12 repositories are published on github.com. Each repository web page is part of an overview page of the corresponding project (called GitHub organisation) which provides information about the project (partners) and includes links to all the repositories set up by the project. The other web resource (Siemens) also provides information on the project that set it up. The link between each repository or web resource and the relevant IPCEI partner was established in the one or more of the following ways:

a) the IPCEI partner is identified as owner/creator on the repository website; either on the repository web page itself or on the corresponding GitHub organisation overview page (or, in the case of Siemens’ web resource, on the website);
b) the funding ID displayed on the repository page or GitHub organisation overview page corresponds to the funding code indicated in the grant decision for the relevant partner;
c) the repository web page or corresponding GitHub organisation overview page includes a link to a project website, which identifies the relevant partner among the project partners;

The table below shows in which of the ways described above the Commission was able to establish the link between the IPCEI partner and the repository or web resource it has set up:

Partner	a: partner name on repository / resource website	b: funding ID on website	c: project website link on repository website, partner name on project website
Telekom Deutschland GmbH			Yes
SAP SE			Yes
Siemens AG	Yes	Yes	
FH Dortmund	Yes	Yes	
IONOS SE	Yes		Yes
secunet Security Networks AG	Yes	Yes	Yes
SYSGO GmbH	Yes	Yes	Yes
Amadeus GmbH	Yes		Yes
Schunk SE & Co. KG	Yes	Yes	Yes
eco - Verband der Internetwirtschaft e.V.	Yes	Yes	Yes
Siemens Energy Global GmbH & Co. KG		Yes	Yes
HOCHTIEF Engineering GmbH			Yes
AKI GmbH	Yes	Yes	Yes

The evidence therefore shows that at least 3 direct and 8 indirect partners participating in the IPCEI-CIS have set up open-source repositories or other freely accessible web resources containing code. On this basis, it is considered that this constitutive element of the target is satisfactorily fulfilled.

At least 35 of these repositories or web resources have received at least 350 commits each.

Germany provided URL links to 36 repositories set up by the IPCEI partners. Uploads of code to a repository and any change of their content (for example bug-fixes, expanded code) are called a "commit". Because commits can be made by any user, they are a measure of the interest which a repository has attracted from the online programmer community.

The Commission services accessed the links provided by the German authorities on 12 July 2026 in order to verify that at least 35 of these repositories had received at least 350 commits each, taking into consideration the explanations provided in the How-to guide (Evidence No. 6). Thus, they clicked on the URL link to access the repository, then clicked on 'Commits' to access a webpage with all commits the repository had received, including their date. The total number of commits is displayed next to the "Commits" tab.

The Commission services verified that the commits for each repository date from after February 2020, the eligibility cut-off date for the RRF.

For each repository, the Commission services successfully verified that it had been set up by an IPCEI partner among the 3 direct partners and 8 indirect partners referred to above. The link between the repository and the relevant partner was established in one or more of the following ways: the IPCEI partner is identified as owner/creator on the repository website; either on the repository page itself or on the corresponding GitHub organisation overview page; the funding code displayed on the repository page corresponds to the funding code indicated in the grant decision for the relevant partner; or the corresponding GitHub organisation overview page links to the project page, which identifies the relevant partner among the project partners.

The evidence therefore shows that at least 35 repositories had received at least 350 commits. On this basis, it is considered that this constitutive element of the target is satisfactorily fulfilled.

Furthermore, in line with the description of the measure, the investment consists of
i) providing financial support to German participants

Germany provided grant decisions (*Zuwendungsbescheid*) for all the participants (Evidence No. 4 and No. 5). Germany also provided proofs of payment (*Zahlungsdokumentation*) (Evidence No. 7) for all 13 IPCEI participants, demonstrating that financial support has indeed been paid out. In addition, the Commission verified that the repositories and web resource (see above) state that they are financed by NextGenEU, thereby demonstrating financial support.

Germany submitted the funding guidelines (Evidence No. 8) for the IPCEI, which specify this requirement on page 4 in section 3, stating that recipients must be companies with headquarters or a branch in Germany or educational, research or public institutions. For all but two indirect partners, the Commission verified that they had a branch in Germany using the publicly available federal company register (unternehmensregister.de). Two partners are not registered here due to their legal form. Of these, the Commission verified that eco - Verband der Internetwirtschaft e.V. has a German address using the common register portal of the German federal states (handelsregister.de). The other participant is an educational institution, the University for Applied Science Dortmund. The Commission verified that it is based in Germany using the University's founding rules (*Grundordnung*) (Evidence No. 9).

iii) in projects to be implemented as part of an Important Project of Common European Interest (IPCEI).

Each grant decision (Evidence No. 4 and No. 5) demonstrates that the funding concerns a specific a project (*Vorhaben*) identified by a project title on page 1, an individual funding reference, a grant period and a dedicated grant amount. The grant is earmarked exclusively for the implementation of that project.

All direct partners are identified in the Commission Decision (Evidence No. 3) as participants in the IPCEI-CIS. The grant decisions for the indirect partners explicitly state that the funding is granted under the funding guidelines for cloud and edge infrastructure and services under the IPCEI-CIS. All grant decisions (Evidence No. 4 and No. 5) include a funding ID starting with 13IPC…. On this basis, it is considered that the financial support is provided for projects implemented as part of an Important Project of Common European Interest (IPCEI).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 61 Finalisation of projects

Related Measure: 2.2.1 Vehicle manufacturer/supply industry investment programme

Quantitative Indicator: Number of final notices issued

Baseline: 0

Target: 531

Time: Q2 2026

1. Context:

The objective of the measure is to provide support to the digital and ecological transition of the automotive industry. The investment consists of supporting projects in the vehicle sector (excluding targeted support for fossil fuel combustion engine technologies), for example investments or research and development for (i) the digitalisation of production processes, (ii) innovative vehicle technologies and systems for automated driving, efficient electrification or lightweight material building, or (iii) regional innovation clusters for the transformation of the vehicle industry.

Target 61 requires that, for at least 531 funding projects (in the German vehicle manufacturing sector) approved between 2021 and 2026, a final notice (*Schlussvermerk* or *Schlussbescheid*) has been issued.

Target 61 is the third and last milestone or target of investment 2.2.1 (Vehicle manufacturer/supply industry investment programme) and it follows the completion of milestone 59, which is related to the publication of the relevant funding guidelines, and target 60, which is related to the approval of investment projects in the German vehicle manufacturer and technology sector.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document, duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled. The document also describes the different documents from the Profi database.
2	List of projects	An Excel sheet containing a list of 640 projects funded under this measure. The list provides information on i) the (company) name of the recipient, ii) which module of the measure the project falls under, iii) the individual funding code and iv) a brief description of (the digital aspects of) the project.
3	Funding guidelines	Funding guidelines for the different funding modules, including later amendments. The relevant guidelines were published in the Federal Gazette (*Bundesanzeiger*) on 26 March 2021 and entered into force on 16 March 2021: 1. Module A1: Guideline for the Investment programme for modernisation of the vehicle manufacturer / supply industry; 2. Module A2: Guideline for Digitalisation of the vehicle manufacturer / supply industry (a later amendment entered into force on 14 November 2023); 3. Module B: Guideline for Regional Innovation Clusters for the transformation of the vehicle industry.

		4. Module C: Guideline for the Promotion of research and development projects in the context of the BMWi programme "New vehicle and system technologies" (later amendments entered into force on 12 December 2023 and 1 January 2024).
4	Profi manual (*Profi Handbuch*)	The manual of the database system used by the project partners and the ministry to retrieve funding data, including for the final notice. This system was also used for the projects from this measure.
5	Copy of the initial proposal for the project (proposal)	For each item in the sample, a copy of the project proposal (submitted by the funding recipients to the relevant project partner) is provided. This document describes the nature of the project and the role of the recipient within it.
6	Copy of the approval and support decision for implementation (approval)	For each item in the sample, a copy of the project approval decision sent by the relevant project partner to the funding recipient is provided. This document shows that the project partner approved the initial proposal and request for funding.
7	Copy of the certificate of completion of the project (final notice)	For each item in the sample, a copy of a final notice (each signed by the project partner) sent by the relevant project partner to the funding recipient is provided. These show that the use of funds by the recipient was checked by the project partner and the funding process was finished. They contain at least the individual funding code, name of the recipient, signature of the project partner.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

For at least 531 funding projects approved between 2021 and 2026, a final notice (*Schlussvermerk* or *Schlussbescheid*) has been issued.

The German authorities provided a list of projects (Evidence No. 2) with 640 unique projects that focused on investments for the German car manufacturing sector. For each project, the list specifies the (company) name of the recipient, a unique funding code, what module it falls under and a description of (digital aspects of) the project.

The projects in this measure all fall under one of three main modules (with the first module being split into two submodules) designed to: i) modernise or digitalise the vehicle production process; ii) develop new vehicle technologies and; iii) support the development of electric vehicles. The grant support for these projects was granted on the basis of the four corresponding funding guidelines and their amended versions (Evidence No. 3). The projects and funding process under each module were managed by an independent project partner:

- Module A1: Federal Office for Economic Affairs and Export Control (BAFA)
- Module A2: *VDI Technologiezentrum GmbH*
- Module B: *TÜV Rheinland Forschungs- und Innovationsmanagement GmbH* (TÜV Rheinland Consulting GmbH until end of 2024)
- Module C: VDI/VDE Innovation + Technik GmbH

Following the selection of a random sample of 60 units, Germany submitted a project proposal (Evidence No. 5), a project approval document (Evidence No. 6) and a final notice (Evidence No. 7) for each item in the sample. The evidence provided for a sample of 60 units confirmed that this

requirement of the target has been met. Each of the 60 final notices specifies the name of the recipient, the name and/or unique funding code of the project, the date of the final decision and a mention of the proof of use check by the project partner. The name of the recipient and the funding code of the project were cross-checked against the aforementioned list used to draw the sample from and found them to be matching (Evidence No. 2). The final notices may refer to different terms such as “final notification” (*Schlussbescheid*) or “proof of use” (*Verwendungsnachweis*). They all constitute a final notice as they are the final document for the project (see also Evidence No. 4 - Profi manual pages 171, 191, 194 and 238). These final notices are sent by the project partners to the funding recipients to indicate that the use of funds was checked and that the funding process was accordingly finalised and include an official notice of legal remedies. According to the evidence provided, Germany issued 640 final notices for these funding projects, thus exceeding the goal of target 61 by 109.

The Council Implementing Decision (CID) required that the projects under this measure have been approved between 2021 and 2026. For all items in the sample, the project approval document (Evidence No. 6) specifies an approval date before 31 August 2026. For four units in the sample, the original approvals were dated before 2021 (three in December 2020, one in October 2020). This could be considered a minimal substantive deviation from the requirement of the CID. The deviation is minimal because all four projects were approved shortly (1-3 months) before the beginning of 2021 and during the eligibility period of the RRF. In addition, for three out of these four projects the funding only started in 2021. As such, it does not affect the progress towards the achievement of the investment that this target represents. However, even if these four units were to be considered ineligible as a result of the aforementioned deviation from the requirements of the CID, there is statistical assurance that the target has been satisfactorily fulfilled, taking into account the overachievement by 109 projects (640 projects for a required 531 projects).

Furthermore, in line with the measure description, the investment shall **consist of supporting projects in the vehicle sector (excluding targeted support for fossil fuel combustion engine technologies).** The funding guidelines for the four different modules (Evidence No. 3) explicitly mention what kind of projects can be supported. They specifically mention that only projects for (technologies for) the vehicle sector can be supported. Moreover, fossil combustion engine technologies do not feature in any of the categories listed (nor are they explicitly mentioned in the guidelines). In addition, by reading through the project proposals for each item in the sample (Evidence No. 5), the Commission services confirmed that funding was focused on projects related to the digital or ecological transition in the vehicle sector. On this basis, it is concluded that these projects focused on technologies in the vehicle sector and that no targeted support for fossil combustion engine technologies was given for the projects.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 69 Project outputs

Related Measure: 2.2.3 Digitalisation and Technology Research Centre of the Bundeswehr

Quantitative Indicator: Number of outputs

Baseline: 0

Target: 710

Time: Q1 2026

1. Context:

The objective of the measure is to support research and innovation activities on strategic technological areas for the future, in order to contribute to German and European digital and technological sovereignty. The investment consists of supporting research, development and innovation activities led by the Digitalisation and Technology Research Centre of the Bundeswehr (Zentrum für Digitalisierungs- und Technologieforschung der Bundeswehr – dtec.bw).

Target 69 requires the Digitalisation and Technology Research Centre of the Bundeswehr to submit a report to the Federal Ministry of Defence confirming the following outputs:

- 410 publications;
- 60 doctoral theses submitted;
- 200 collaborations initiated with other research institutes, industrial companies, startups or with agencies of the Federal Armed Forces and the public administration (as evidenced by, for example, letters of intent, confirmation letters, or cooperation agreements);
- 20 prototypes of technologies;
- 20 patent applications.

Target 69 is the fourth and last target of the investment. It follows the completion of target 65 on the launch of research projects, milestone 66 concerning the progress of funded projects in research, cooperation, knowledge transfer and technology and target 67, related to an interim evaluation of the projects launched under target 65.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Evaluation Report	A report “Digitalisation and Technology Research Center of the Bundeswehr (dtec.bw)” to the Federal Ministry of Defence (BMVg), signed by Professor Geralt Sieber (UniBw Munich) and Professor Thomas Klassen (UniBw Hamburg), who jointly constitute the scientific leadership of dtec.bw and dated June 2026.
3	Spreadsheet annexed to the evaluation report (list of publications)	A list of 602 selected publications resulting from projects at UniBw Munich and UniBw Hamburg, including relevant details and hyperlinks to the publications.
4	Spreadsheet annexed to the	A list of 69 submitted doctoral theses, including links to the

	evaluation report (submitted doctoral theses)	full theses where available.
5	Spreadsheet annexed to the evaluation report (list of collaborations)	A list of 241 selected collaborations initiated with other research institutes, industrial companies, startups and public administrations, including relevant details on their scope and participating organisations.
6	Spreadsheet annexed to the evaluation report (list of prototypes of technologies)	A list of 23 selected prototypes of mature technologies resulting from projects at UniBw Munich and UniBw Hamburg, including relevant descriptions and details and hyperlinks, where relevant.
7	Spreadsheet annexed to the evaluation report (list of patent applications)	A list of 23 selected patent applications resulting from projects at UniBw Munich and UniBw Hamburg, including relevant references and details, including the hyperlink to the published application, where available.
8	Sample of 61 units	Based on a stratified sample, the Commission services have reviewed: i. For 35 publications: the hyperlink to the publications. ii. For five doctoral theses: the hyperlink to the published doctoral thesis or a digital copy of the submitted thesis. iii. For 17 collaborations: Copies of the evidence for the establishment of the cooperation (cooperation agreements). iv. For two prototypes: the hyperlink to the prototype (product website). v. For two patent applications: the hyperlink to the relevant entry in the German Patent and Trade Mark Office register (Deutsches Patent- und Markenamt)

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

A report submitted by the Digitalisation and Technology Research Centre of the Bundeswehr to the Federal Ministry of Defence, …

The relevant report (Evidence No. 2) was submitted by the Digitalisation and Technology Research Centre of the Bundeswehr (hereinafter referred to as “dtec.bw”) to the Federal Ministry of Defence dated June 2026 and was signed by Professor Geralt Sieber (UniBw Munich) and Professor Thomas Klassen (UniBw Hamburg), who jointly constitute the scientific leadership of dtec.bw.

Furthermore, in line with the description of the measure, **the investment consists of supporting research, development and innovation activities led by the Digitalisation and Technology Research Centre of the Bundeswehr (dtec.bw).**

The report (Evidence No. 2) outlines 66 supported projects. The report explains that dtec.bw was established in August 2020 with the aim, inter alia, to strengthen research in digital and emerging technologies and support innovation and digital sovereignty. The report contains, as an annex, the spreadsheets (Evidence No. 3-8) that list the outputs of the supported projects. The report shows that the research, development and innovation activities were led by dtec.bw.

…confirming the following outputs:

- **410 publications;**
- **60 doctoral theses submitted;**
- **200 collaborations initiated with other research institutes, companies, startups or with agencies of the Federal Armed Forces and the public administration (as evidenced by, for example, letters of intent, confirmation letters, or cooperation agreements);**
- **20 prototypes of technologies;**
- **20 patent applications.**

The five spreadsheets included in the report cover: a list of 602 publications resulting from projects at UniBw Munich and UniBw Hamburg, including relevant details and hyperlinks (Evidence No. 3); a list of 69 submitted doctoral theses, including links to the full theses, where available (Evidence No. 4); a list of 241 collaborations initiated with other research institutes, industrial companies, startups and public administrations, including relevant details on their scope and participating organisations (Evidence No. 5); a list of 23 prototypes of mature technologies resulting from projects at UniBw Munich and UniBw Hamburg, including relevant descriptions and details and hyperlinks (Evidence No. 6), and a list of 23 patent applications resulting from projects at UniBw Munich and UniBw Hamburg, including relevant references and details, including the hyperlink to the published application, where available (Evidence No.7).

Following the selection of a random sample of 61 units, Germany submitted 35 hyperlinks to publications, four hyperlinks to the published doctoral thesis and one digital copy of a submitted habilitation thesis, 17 cooperation agreements, two hyperlinks to the prototype (product website) and two hyperlinks to the relevant entry in the German Patent and Trademark Office register (*Deutsches Patent- und Markenamt*). One more unit was added to the standard sample of 60 units in order to ensure that all relevant categories required by the Council Implementing Decision would be covered proportionally. The evidence provided for a sample of 61 units confirmed that the requirements of the target have been met for 60 out of the 61 units. For publications, the Commission services validated the hyperlinks to each publication and cross-referenced the publication title and author(s) against the corresponding information in the spreadsheet. For doctoral theses, the Commission services validated the hyperlinks to the published doctoral thesis and in one case the digital copy of a submitted habilitation thesis. The Commission services then cross-referenced the name of the doctoral/habilitation student and the thesis title against the corresponding information in the spreadsheet. Since one of the theses from the sample was not a doctoral thesis but a habilitation thesis (habilitation is the next step after the PhD in the German academic context), this unit in the sample does not meet all of the criteria from the Council Implementing Decision. For collaborations, the Commission services reviewed the submitted cooperation agreements with other research institutes, companies and startups and cross-referenced the collaboration partner and the type of collaboration against the corresponding information in the spreadsheet. For prototypes of technologies, the Commission services validated the hyperlink to the product/company website of the prototype and cross-referenced the name of the product/prototype against the corresponding information in the spreadsheet. For patent applications, the Commission services validated the hyperlinks to the published patent applications at the German Patent and Trademark Office register and cross-referenced the publication numbers of the patent applications against the corresponding information in the spreadsheet. According to the evidence provided, 958 outputs were produced, thus exceeding the goal of 710 outputs for target 69 by 248.

A statistical analysis was carried out taking into account the overachievement of the target of 958 outputs for a required 710 outputs. Based on this, there is statistical assurance that the target has been met, and all its constitutive elements have been satisfactorily fulfilled.

The Commission services verified that the outputs were not produced before February 2020, by checking the dates mentioned on the submitted documents; for prototypes, it was checked directly on the provided websites. Altogether, the output of 602 publications can be considered met, thus exceeding the goal of 410 publication by 192 publications; the output of 69 submitted doctoral theses can be considered met, thus exceeding the goal of 69 submitted doctoral theses by 9 submitted doctoral theses; the output of 241 collaborations can be considered met, thus exceeding the goal of 200 collaborations by 41 collaborations; the output of 23 prototypes of mature technologies can be considered met, thus exceeding the goal of 20 prototypes of mature technologies by three prototypes of mature technologies and the output of 23 patent applications can be considered met, thus exceeding the goal of 20 patent applications by three patent applications (Evidence No. 2-8).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 82 Final external evaluation report on supported research projects

Related Measure: 3.1.3 Educational centres of excellence

Qualitative Indicator: Publication of the final external evaluation report

Time: Q2 2026

1. Context:

The objective of this reform is to institutionalise digital education as part of the established teacher education and further education framework. It consists of supporting competence centres for digital education by providing scientific content.

Milestone 82 concerns the publication of the final external evaluation report on supported projects.

Milestone 82 is the fourth and last milestone or target of the reform. It follows the completion of milestone 79 related to the entry into force of the first funding guidelines and call for tenders for a project-executing agency for the overall programme, of target 80 related to the approval of at least 45 research projects, and of milestone 81 related to the entry into force of three additional funding guidelines.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary Document duly justifying how the milestone (including all its constitutive elements, as listed in the description of the milestone and the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Final external evaluation report on supported research projects	The final external evaluation report on supported research projects by the external evaluation agency Ramboll Management Consulting GmbH was published on the website of the Ministry for Education, Family Affairs, Senior Citizens, Women and Youth (*Bundesministerium für Bildung, Familie, Senioren, Frauen und Jugend (BMBFSFJ)*) in June 2026, and can be accessed via the following link: *https://www.bmbfsfj.bund.de/bmbfsfj/themen/bildung/schule/kompetenzzentren-fuer-digitales-unterrichten-275092* (verified by Commission services on 14 August 2026).
3	Annex to the final external evaluation report on supported research projects	The annex to the above final external evaluation report by the external evaluation agency Ramboll Management Consulting GmbH was published on the website of the Ministry for Education, Family Affairs, Senior Citizens, Women and Youth (*Bundesministerium für Bildung, Familie, Senioren, Frauen und Jugend (BMBFSFJ)*) in June 2026, and can be accessed via the following link: *https://www.bmbfsfj.bund.de/bmbfsfj/themen/bildung/schule/kompetenzzentren-fuer-digitales-unterrichten-275092* (verified by Commission services on 14 August 2026). It comprises methodological appendices, including the questionnaires used, as well as a complete list of the supported research projects and a short description of the results.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

The final external evaluation report on supported research projects has been published.

The final external evaluation report on supported research projects (Evidence No. 2) and its annex (Evidence No. 3) by the external evaluation agency Ramboll Management Consulting GmbH was published on the website of the Ministry for Education, Family Affairs, Senior Citizens, Women and Youth (*Bundesministerium für Bildung, Familie, Senioren, Frauen und Jugend (BMBFSFJ)*) in June 2026.

The final external evaluation report explains the evaluation mandate and methodology and assesses the programme along several dimensions: achievement of objectives, effects, broader contributions to digitalisation, the programme's coherence with other initiatives, sustainability, and economic efficiency. It goes in detail into the experiences of the four competence centres for digital and digitally supported teaching (relating to MINT subjects; Languages, Social and Economic Sciences; Creative subjects, Music and Sport; School System) and also analyses the networking and transfer hub (*Vernetzungs- und Transferstelle*). It reports of 452 publications and outputs as of 23 April 2026, from 203 research projects. The related research projects and their outputs, such as publications, qualification concepts, teaching materials, guidelines, videos and podcasts, are explained in detail in the annex to the report, including online links when available. Around 90% of project partners assessed the objective of developing and implementing professional-development measures as having been achieved "strongly" or "very strongly", to which network-building and cooperation was seen as making an important contribution. Economic efficiency, comparing costs and outcomes, was also seen as overall positive. The report also includes a section on lessons learned, for even better outcomes in the future.

The Commission services accessed the link provided by the authorities on 14 August 2026 to verify the publication of the final external evaluation report on supported research projects and its annex. This check was completed successfully, confirming that the final external evaluation report on supported research projects and its annex was published (see Evidence No. 2 and No. 3).

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 85 Final assessment report on the modernisation of educational institutions

Related Measure: 3.1.4 Modernisation of the Federal Armed Forces' educational and training facilities

Qualitative Indicator: The Federal Ministry of Defence (BMVg) has taken note of the final assessment report on the modernisation of educational institutions

Time: Q1 2026

1. Context:

The objective of this investment is to contribute to the digitalisation of the Federal Armed Forces (*Bundeswehr*). It consists of equipping Federal Armed Forces' educational institutions with information technology.

Milestone 85 concerns the final assessment report on the modernisation of educational institutions.

Milestone 85 is the third and last milestone or target of the investment. It follows the completion of milestone 83 related to the signature of the contract with the IT service provider for the initial project phase of assessing the IT systems of the educational institutions, and of target 84 related to the analysis of the educational institutions and identification of their IT needs.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary Document duly justifying how the milestone (including all its constitutive elements, as listed in the description of the milestone and the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Final assessment report	Final assessment report on the results of the modernisation of educational institutions signed by the Project Manager of the Federal Office of Federal Armed Forces Equipment, Information Technology and In-Service Support (*dt. Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr*) (hereinafter referred to as BAAINBw) on 15 April 2026.
3	Acknowledgment email	Email of the Federal Ministry of Defence (BMVg) sent to the Project Manager of the BAAINBw on 15 April 2026 which states that the ministry has taken note of the above final assessment report.
4	Modernisation fact files	14 modernisation measure fact files which define and specify the scope of the measure, prepared by the project team of the BAAINBw, referenced in and contributing to the final assessment report as of 15 April 2026 (see Evidence No. 2 above).
5	Facility fact files	Fact files for 93 examined facilities, prepared by the project team of the BAAINBw, setting out the specific modernisation needs and the interventions undertaken for each facility, referenced in and contributing to the final assessment report as of 15 April 2026 (see Evidence No. 2 above).

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

A final assessment report by the Project Manager of the BAAINBw on the results of the modernisation of educational institutions has been taken note of by the Federal Ministry of Defence (BMVg).

A final assessment report by the Project Manager of the BAAINBw (Federal Office of Federal Armed Forces Equipment, Information Technology and In-Service Support; *dt. Bundesamt für Ausrüstung, Informationstechnik und Nutzung der Bundeswehr*), on the results of the modernisation of educational institutions (see Evidence No. 2) has been taken note of by the Federal Ministry of Defence (*BMVg*) as evidenced by an email of the Federal Ministry of Defence (*BMVg*) sent to the Project Manager of the BAAINBw on 15 April 2026 which states that the ministry has taken note of the above final assessment report (see Evidence No. 3).

Furthermore, in line with the description of the measure, **it consists of equipping Federal Armed Forces' educational institutions with information technology.**

The final assessment report (see Evidence No. 2) concludes the information technology (IT) modernisation project of the educational institutions of the Federal Armed Forces. The measure started with a detailed needs assessment, where the IT environments and needs of the 60 initially designated educational institutions have been analysed, and the needs and implementation possibilities have been identified in a dedicated report. Based on this needs assessment that was assessed as part of milestone 84, the authorities proceeded with equipping Federal Armed Forces' educational institutions with information technology as evidenced by the final assessment report. As the needs assessment report, also the final assessment report was prepared by the BAAINBw, and gives a comprehensive overview of the IT modernisation done.

The final assessment report provides detailed information on the project implementation, including on the 76 educational institutions that were modernised (see Evidence No. 1). It lists the institutions that benefitted from interventions, reports of implementation action and explains the horizontal measures undertaken, such as the provision of WLAN access, the development of an evaluation software and of a software allowing the testing of new IT methods for digital education. The reporting also includes a cost analysis and identification of good practices.

Beyond the final assessment report, Germany provided further project documentation as supplementary evidence. These documents add further details on how the educational institutions of the Federal Armed Forces were equipped with information technology. 14 modernisation fact files defined the scope of the IT improvements (see Evidence No. 4), and a matching reporting was included in the final assessment report. A standalone fact file was prepared for each of the 93 facilities analysed, specifying the technical modernisation components, the undertaken interventions, and their cost, which was then summarised in the final assessment report (see Evidence No. 5).

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 88 Submission of the Länder reports on the number of childcare places

Related Measure: 4.1.1 Investment programme 'Childcare- financing' 2020/21: special fund 'Child Day-care Expansion'

Qualitative Indicator: The Länder have submitted their reports on childcare places.

Time: Q4 2025

1. Context:

The objective of the measure is to create new childcare facilities and refurbish existing facilities. It consists of entry into force of legal acts and support to Länder and local authorities.

Milestone 88 requires that the *Länder* have submitted their reports to the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth. The ministry has issued a report confirming that 45 000 childcare places have been funded.

Milestone 88 is the third and final milestone of this investment, and it follows the completion of milestone 86, related to the entry into force of the legal requirements for the funding of childcare places., and milestone 87, related to the publication of an interim report on approved and created childcare places and investments in equipment (in line with Article 30(2) and 30(3) KitaFinHG).

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the milestone (including all its constitutive elements, as set out in the description of the milestone and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Collection of *Länder*-Reports	Copies of the reports of each of the 16 *Länder* on monitoring the 5th investment programme "Childcare-financing 2020/21", by 31 December 2023 (according to the Federal Financial Assistance Act for the Expansion of Day Care for Children). The 16 sets of reports were submitted to the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth, with each *Land* reporting on the state of implementation, including on funding, number of childcare places, number of subsidised equipment, in accordance with the monitoring and guidance obligations.
3	Federal summary report of the final reports submitted by the *Länder* ("*Zusammenfassender Abschlussbericht zu den Abschlussberichten der Länder gem. des Gesetzes über Finanzhilfen des Bundes zum Ausbau der Tagesbetreuung für Kinder (KitaFinHG) für das 5. Investitionsprogramm*")	Report by the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth on the implementation of the Investment programme 'Childcare-financing' 2020/21: special fund 'Child Day-care Expansion' dated 31 December 2025. The report was also confirmed to have been published online, verified on 20 August 2026, available on the website https://www.fruehe-chancen.de/fileadmin/user_upload/PDF-Dateien/Abschlussbericht_BMBFSFJ_5._Investitionsprogramm_Kindertagesbetreuung_final___2___1_.pdf.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

The Länder have submitted their reports to the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth.

Each of the 16 Länder submitted a report to the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth on the state of implementation of the 5th investment programme 'Childcare-financing 2020/21' by 31 December 2023 (following the requirement in the Federal Financial Assistance Act, KitaFinHG). Subsequently, the Federal Ministry for Education, Family Affairs, Senior Citizens, Women and Youth in cooperation with the Federal Ministry of Finance coordinating the implementation of the Recovery and Resilience Plan in Germany submitted the *Länder*'s reports to the Commission, confirming that the Federal Ministry was in possess of the submitted reports.

For each *Land*, the submitted evidence (evidence No. 2) contains a reporting form with numerical details on implementation (*Formblatt Abschlussbericht*) and a detailed report (*Sachbericht*) submitted to the federal government on the actual implementation, including information on funding used, number of childcare places supported, and number of subsidised equipment.

The submitted evidence demonstrates in detail the checks and audits that were undertaken to ensure effective implementation. For half of the *Länder* (*Baden-Württemberg, Bayern, Brandenburg, Hessen, Niedersachsen, Nordrhein-Westfalen, Saarland, Sachsen, Schleswig-Holstein and Thüringen*) there are standalone reports of the proof of use verification drafted by the Länder (*Ergänzung Verwendungsnachweisprüfung,* included among evidence No. *2*), and for the other half of the *Länder* information on verification is included in the main *Länder* report (*Sachbericht*, evidence No. 2). Proof of use verifications were conducted as part of a multi-stage process that focused on the appropriate use of funds and on the creation of childcare places. These verifications typically included a set of consecutive phases: preliminary review (checks for completeness, timeliness, and signatures), verification of the achievement of the funding purpose (comparing the newly created or refurbished childcare places with the grant approval notices), financial and substantive review (reviewing primary evidence, invoices, procurement documents, and conducting on-the spot checks), and documentation (issuing closure letters, and, in cases of concerns, partial revocation notices with repayment demands).

The ministry has issued a report confirming that 45 000 childcare places have been funded.

Based on the *Länder*'s final reports, the Federal Ministry of Education, Family, Senior Citizens, Women, and Youth (BMBFSFJ, hereafter Ministry) issued a final summary report (*Zusammenfassender Abschlussbericht zu den Abschlussberichten der Länder,* evidence No. 3).

In line with the *Länder* reports that reported of the implementation of the Federal Financial Assistance Act (*KitaFinHG*) for the 5th investment programme 'Childcare-financing 2020/21', until 31 December 2023, the Ministry used the same cut-off date in its final summary report.

The final summary report documents the programme objective, the financial support provided, the projects' timeline, and the outcomes in the nurseries and kindergarten. It shows that 156 820 childcare places have been funded, of which 72 998 childcare places were newly created and the rest refurbished. It shows that the total funding amount was EUR 3 316 986 762, of which the federal government provided EUR 969 468 896.

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 103 Increase in the digital maturity levels of hospitals

Related Measure: 5.1.2 Programme to future-proof hospitals

Quantitative Indicator: Percentage of hospitals with increased digital maturity i) in at least two categories and ii) in at least three categories

Baseline: i) 0 and ii) 0

Target: i) 80 and ii) 60

Time: Q2 2026

1. Context:

The objective of the measure is to enable hospitals to invest in their digitalisation. The measure consists of establishing a fund from which hospitals may receive financial support for modernisation projects, increasing their overall digital maturity levels.

Target 103 requires that at least 80% of the hospitals whose application for funding under the "Programme to future-proof hospitals" was approved have increased their digital maturity in at least two categories related to the "Programme to future-proof hospitals" by at least two digital maturity levels in the employed digital maturity system compared with the evaluation from 30 June 2021 and at least 60% of the hospitals whose application for funding under the "Programme to future-proof hospitals" was approved have increased their digital maturity in at least three categories related to the "Programme to future-proof hospitals" by at least two digital maturity levels in the employed digital maturity system compared with the evaluation from 30 June 2021.

Target 103 is the second and last target of the investment, and it follows the completion of target 101, related to the funding of at least EUR 2.7 billion for the programme to future-proof hospitals.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Methodology used for the digital maturity classification signed	Description of methodology by the consortium DigitalRadar signed on 20 and 21 April 2026 explaining the calculation of the DigitalRadar score for determining the digital maturity levels.
3	First interim report first maturity measurement	First report produced by the consortium DigitalRadar in 2022 summarising the findings of the first digital maturity measurement by cut-off date 30 June 2021.
4	Second interim report second maturity measurement	Second report produced by the consortium DigitalRadar in 2025 summarising the findings of the second digital maturity measurement by cut-off date 30 June 2024.
5	First results third maturity measurement	Presentation by the consortium DigitalRadar of 17 June 2026, summarising the first results and findings of the third digital maturity measurement by cut-off date 1

		March 2026.
6	Confirmation letter signed	Confirmation letter signed by the consortium DigitalRadar on 20 and 21 April 2026 confirming that the list No. 7 provided with all the data on the hospitals and their digital maturity measurements is based on the methodology described in Evidence No. 2.
7	List of all funded hospitals and all digitally matured hospitals including their locations	Main list provided by the German authorities containing all information on the 1 604 hospitals whose application for funding under the "Programme to future-proof hospitals" was approved. The list includes the name of the hospital, their locations, address, received grant decisions and their digital maturity measurements.
8	General funding guideline	General funding guidelines to future-proof hospitals (dated 2 October 2023).
9	Scientific publication maturity model	Scientific article from 2024 published in Health Policy and Technology 13 (2024) on the methodology and results of measuring the digital maturity of hospitals in Germany.
10	List of approved applications for projects	List provided by the German authorities containing all the 5 775 projects implemented by the 1 604 hospitals to improve their digital maturity, including their funding amounts.
11	Federal and state level grant decisions	For 60 sampled units, federal and state level grant decisions for funding projects under the "Programme to future-proof hospitals" to improve the digital maturity of hospitals.
12	Digital maturity certificates	For 60 sampled units, certificates issued by the consortium DigitalRadar stating the hospital name with its identification and location numbers, address, received grant decisions and showing the scoring of the digital maturity measurements as well as the change between the first and the third measurement. These certificates are dated between 24 July 2026 and 4 August 2026.
13	Supplementary supporting evidence in the form of documents and spreadsheet extracts	For individual sampled units, supplementary supporting evidence in the form of documents and spreadsheet extracts were submitted to clarify for these hospital locations or subsidiaries, their affiliation to a hospital group or to a network of hospitals.
14	Additional underlying calculations to the digital maturity measurements	Additional underlying calculations for the digital maturity measurement for three hospitals as used by the consortium DigitalRadar.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

At least 80% of the hospitals whose application for funding under the "Programme to future-proof hospitals" was approved have increased their digital maturity in at least two categories related to the "Programme to future-proof hospitals" by at least two digital maturity levels in the employed

digital maturity system compared with the evaluation from 30 June 2021 and at least 60% of the hospitals whose application for funding under the "Programme to future-proof hospitals" was approved have increased their digital maturity in at least three categories related to the "Programme to future-proof hospitals" by at least two digital maturity levels in the employed digital maturity system compared with the evaluation from 30 June 2021.

According to the list provided by the German authorities (Evidence No. 7), in total 1 604 hospitals have received funding under the "Programme to future-proof hospitals". The funding guidelines of this programme can be found under Evidence No. 8. These 1 604 hospitals received funding for 5 775 projects, as hospitals could apply for several projects. Evidence No. 10 shows this list of 5 775 projects with their total funding volume of EUR 2 942 008 397.49. By the end of this measure, 107 out of the 5 775 projects involving 19 hospitals were cancelled and the corresponding funds returned representing EUR 20 650 851.04. This means that by the end of this measure 5 668 projects for a volume of EUR 2 921 357 546.45 have been implemented.

This original list of 5 775 projects was supposed to be implemented by the 1 604 hospitals and the Commission services verified and confirmed that every project number of these 5 775 projects is attributed to at least one of the 1 604 hospitals by comparing and matching the list of projects (Evidence No. 10) with the list of hospitals (Evidence No. 7). Also considering the aforementioned funding volume of these 5 775 projects, the corresponding 1 604 hospitals listed in Evidence No. 7 are considered to represent the total population of hospitals participating in the funding "Programme to future-proof hospitals". 1 604 is thus the total number (100%) used for determining the percentages of 80% (1 284 hospitals) and 60% (963 hospitals) for assessing the satisfactory fulfilment of this target.

The 80% criterion requires that 80% of the hospitals have increased their digital maturity by at least 2 levels in 2 categories. The 60% criterion requires that at the same time 60% of the hospitals have increased their digital maturity by at least 2 levels in 3 categories, so 1 category more.

The list of Evidence No. 7 shows that 1 338 hospitals representing 83.4% of the 1 604 hospitals have achieved the 80% criterion, and 1 221 hospitals representing 76.1% of the 1 604 hospitals have achieved the 60% criterion.

The comparison of the increase in digital maturity levels is determined by comparing the results of the third measurement in 2026 to the results of the first measurement in 2021. The results of the second measurement in 2024 (see also corresponding report under Evidence No. 4) are not relevant for the assessment of the satisfactory fulfilment of this target but were nevertheless checked to show the same results in the list of Evidence No. 7 and the digital maturity certificates (Evidence No. 12).

The three measurements of the digital maturity of hospitals were conducted by the consortium DigitalRadar described on pages 6-7 of the first measurement report (Evidence No. 3). This consortium consists of companies, research institutes and scientists, namely inav GmbH, HIMSS Europe GmbH, LOHFERT & LOHFERT AG, RWI – Leibniz-Institut für Wirtschaftsforschung, Universität St. Gallen – School of Medicine, HIMSS Inc. and Prof. Dr. Sylvia Thun.

The consortium DigitalRadar developed a maturity model over 7 categories for measuring the digital maturity of hospitals (see pages 8-12 of Evidence No. 3). The methodology of measuring the digital maturity of hospitals is further explained in Evidence No. 2 signed by the consortium DigitalRadar on 20 and 21 April 2026 and the scientific article published in 2024 in the journal "Health Policy and Technology" (Evidence No. 9).

The 7 categories for the digital maturity measurement are:

i. Structures and Systems
ii. Resilience Management & Performance
iii. Organisational Control & Data Management
iv. Clinical Processes
v. Information Exchange
vi. Telehealth
vii. Patient Participation

For each of the 7 categories the 1 604 hospitals should improve their digital maturity by at least 2 levels. Achieving an improvement of more than the required 2 levels in any given category is welcome but has no further relevance for the assessment of the target. If a hospital achieves these 2 or more levels for at least 2 categories, this hospital counts towards the 80% criterion. If the hospital achieves 2 or more levels in at least 3 of these 7 categories it also counts towards the 60% criterion. Achieving an improvement of the required levels in more than 3 categories is welcome but has no further relevance for the assessment of the target.

The digital maturity score of each hospital is based on its replies to a questionnaire, for which it received a normalised score between 0 and 100 for each of the 7 categories. Each category is then divided into 10 levels from 1 to 10 based on a grouping of the hospitals into deciles ranked by their score for each category. The grouping by deciles puts the best 10% of hospitals with the highest score in level 10, the worst 10% of hospitals with the lowest score in level 1 and accordingly each 10% of hospitals in between to the levels 2 to 9. This grouping into deciles is done for each of the 7 categories independently, so that one hospital can have different digital maturity levels per category.

The Commission services verified this classification into deciles by counting the number of hospitals for each of the 10 levels from 1 to 10 for each of the 7 categories in the first measurement of 2021, as given in the list of Evidence No. 7. This verification showed that the number of hospitals in any level of any category ranges from 152 to 163 hospitals showing an even distribution over all levels and categories and thus confirming the classification into deciles. The results of this 2021 measurement were then locked and constitute the basis for comparison with the third measurement in 2026. Indeed, the same assessment for the third measurement in 2026 showed that the levels of the hospital for all categories were not evenly distributed anymore but heavily skewed to the higher levels, thus showing the improvement of digital maturity achieved over the years at the level of the population as a whole.

For determining the change in levels for each of the 7 categories, the normalised score of the third measurement in 2026 is compared to the locked scoring table of the measurement in 2021. As hospitals have improved their digital maturity, they achieve higher scores in the questionnaire and achieve thus a higher level in this reference scoring table of 2021. The Commission services verified that this scoring table of 2021 used for determining the digital maturity levels for all measurements is the same in the description of the methodology of Evidence No. 2 and on page 40 of the first interim report (Evidence No. 3), as well as in the underlying calculations of the digital maturity measurements (Evidence No. 14).

This change in levels between the first and the third measurement, along with the achieved levels in each of the 7 categories for each measurement, are presented for each hospital in the list of Evidence No. 7. In the confirmation letter signed on 20 and 21 April 2026, the consortium DigitalRadar confirms that this list was produced following the methodology of the digital maturity

measurement described in Evidence No. 2. Moreover, this list shows for each hospital its name, its identification and location number, its address, the identification number for the digital maturity assessment as well as the federal and state level grant decision numbers of all the projects out of the possible 5 775 projects this hospital participated in. This list further shows for each hospital in how many of the 7 categories this hospital achieved an increase of its digital maturity by at least 2 levels. If this number of categories is 2 or higher, then this hospital is marked as counting towards the 80% criterion. If this number is 3 or higher, this hospital is marked as counting towards the 60% criterion. Adding the number of hospitals counting successfully towards these two criteria in this list determines the percentage of successful hospitals for this target.

The Commission drew a sample of 60 hospitals out of the 1 505 that participated in the digital maturity measurement, independently of whether they did or did not achieve the 80% or the 60% criteria. This approach allowed the Commission services to validate all the data presented for the different hospitals in the list of Evidence No. 7, instead of only successful ones.

Among the 1 604 hospitals, there were 19 hospitals that had cancelled their projects and returned the funding received. These 19 hospitals were excluded from drawing the sample and were automatically counted as not counting towards either the 80% or the 60% criteria. Another 80 hospitals were excluded from the sampling as their digital maturity data was incomplete as they had not participated in either the first or the third digital maturity measurement so that the required improvement in levels could not be determined. Equally, these 80 hospitals were not counted towards the 80% and the 60% criteria. This leaves 1 505 hospitals out of the 1 604 for which complete digital maturity data was available, and which were thus used for drawing the sample of 60 units. However, as noted, these hospitals with returned funding and incomplete digital maturity testing nonetheless counted towards the total relevant hospital population (1 604 = 100%).

Following the selection of a random sample of 60 units, Germany submitted for each unit in the sample the federal and state level grant decisions related to the “Programme to future-proof hospitals” (Evidence No. 11) and the certificates for the digital maturity measurements (Evidence No. 12), which show the improvement in digital maturity levels for each of the 7 categories achieved by the hospitals that received funding under the “Programme to future-proof hospitals”. In the case of some units, Germany also submitted supplementary supporting evidence, notably to clarify for these hospital locations or subsidiaries their affiliation to a hospital group or to a network of hospitals (Evidence No. 13). In two cases the underlying calculations for the digital maturity levels were provided to corroborate the results of the digital maturity measurements (Evidence No. 14).

The assessment of each unit in the sample included verifying that the name of the hospital sampled in the list of Evidence No. 7 matches the name of the beneficiary in the federal and the state level grant decision. Small differences in the name of the hospital were considered immaterial as they could still be correctly identified, where relevant with reference to the aforementioned supplementary documents submitted by Germany (Evidence No. 13). The funding amounts of the federal grant decision were checked to match the same funding amount in the state level grant decision and also to match the indicated amount for each project of the list of Evidence No. 10 comprising the 5 775 projects. The federal and state level grant decision numbers were checked to match the same information in the list of Evidence No. 7.

The digital maturity certificates were checked to contain the same data for all the levels and categories and for all the three measurements as the same data contained in the list of Evidence No. 7. The calculation of the change in digital maturity levels on the digital maturity certificate was checked for mathematical correctness. Furthermore, it was checked whether the levels in the

certificate match the same data in the file of Evidence No. 7, along with the conclusions drawn there regarding the number of categories showing an increase by at least 2 digital maturity levels and the corresponding marking the unit in terms of counting towards the 80% or the 60% criteria.

It was also checked whether the following information shown in the digital maturity certificate corresponds to the list of Evidence No. 7: name of hospital, identification and location number, digital maturity assessment number, address, and federal and state level grant decision numbers of the projects the hospital participated in.

In the assessment of the sample of 60 units, some clerical errors were detected that are all assessed to be of minor importance and not to impede the calculation of the improvement of the digital maturity levels or the satisfactory fulfilment of this target.

As a conclusion, the evidence provided for a sample of 60 units confirmed that the data provided in the corresponding list is correct, apart from some minor clerical errors, and that the requirements of the target regarding the increase in digital maturity levels have been met.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 110 Additional application cases

Related Measure: 6.1.1 European identity ecosystem

Quantitative Indicator: Number of application cases

Baseline: 5

Target: 10

Time: Q4 2025

1. Context:

The objective of the measure is to create a digital ecosystem that verifies identities and personal documents online. The measure consists of making application cases for the identity ecosystem available online.

Target 110 requires the online availability of five additional application cases for the identity ecosystem with at least 10 000 users each, bringing the total number of application cases to ten.

Target 110 is the third and final target of the reform, following target 108, which required putting a pilot project for digital hotel check-ins with at least 100 participating hotels into operation and target 109 which required the online availability of four additional application cases for the identity ecosystem, each with at least 10 000 users.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	List of application cases	List of six application cases, each with a description of the provider, a description of the application and its functionalities, and a link to the online service (all verified by Commission services as functioning on 18 August 2026): **(i)** **eID identification service for the for the digital opening of a bank account at 'Volks- und Raiffeisenbanken' provided by Atruvia AG:** https://atruvia.de/ **(ii)** **eID service for the identification and authentication via a health care service provider app provided by BITMARCK:** https://www.bitmarck.de/ **(iii)** **eID identification via the comdirect app for the digital opening of a bank account:** https://www.comdirect.de/cms/lp/eka-kundenabfrage.html **(iv)** **eID identification via the IDnow platform/app:** https://idnow.io/de/; https://www.raisin.com/de-de/registration/step/welcome/?product=DBK107 **(v)** **ID photo transfer by via the application provided by RINGFOTO:** https://play.google.com/store/search?q=alfo+passbild&c=apps ; https://ringfoto.de/ ; https://alfo-passbild.com/fotografen-information/ **(vi)** **Electronic registration of residence with eID identification provided by BundID:** https://wohnsitzanmeldung.gov.de/

3	User manuals	A copy of the user manual or the Software Development Kit (SDK) for each of the six application cases**:** **(i)** User Manual on the application case concerning the digital opening of a bank account by the company Atruvia AG (*User Manual zum Anwendungsfall der digitale Kontoeröffnung des Unternehmens Atruvia AG)* issued on 10 July 2026; **(ii)** User Manual on the application case concerning the digital identification and authentication in the health care sector by the company BITMARCK GmbH *(User Manual zum Anwendungsfall der digitalen Identifizierung und Authentifizierung im Gesundheitswesen des Unternehmens BITMARCK GmbH)* issued on *23* June 2026; **(iii)** User Manual on the application case concerning the digital opening of a bank account by the company comdirect *(User Manual zum Anwendungsfall der digitalen Kontoeröffnung des Unternehmens comdirect – eine Marke der Commerzbank AG)* issued on 23 June 2026; **(iv)** User Manual on the application case concerning the company IDnow GmbHs identity-verification-as-a-service' platform (*User Manual zum Anwendungsfall der Identity-Verification-as-a-Service-Plattform des Unternehmens IDnow GmbH*) issued on 23 June 2026; **(v)** User Manual on the application case transmission of ID photos by RINGFOTO GmbH & Co. KG (*User Manual zum Anwendungsfall der Passbildfotoübermittlung des Unternehmens RINGFOTO GmbH & Co. KG)* issued on 4 June 2026; **(vi)** User Manual on the application case electronic registration of residence (*OD Betriebshandbuch eWA - elektronische Wohnsitzanmeldung*) issued on 21 May 2026 (verion 9.0).
4	Certificates	Certificate for each application case issued by the service provider: **(i)** Certificate on the minimum number of 10 000 user identifications (64 849 between 1 January 2025 and 31 December 2025) for the digital identification during the digital bank account opening *(Zertifikat über die Mindestanzahl von 10 000 Vorgängen für die Anwendung der digitalen Kontoeröffnung (der Atruvia AG)*) issued on 23 June 2026; **(ii)** Certificate on the minimum number of 10 000 user identifications (351 408 between 1 January 2025 and 31 December 2025) for the digital identification and authorization in the health care sector (*Zertifikat über die Mindestanzahl von 10 000* Vorgängen *für die Anwendung der digitalen Identifizierung und Authentifizierung im Gesundheitswesen (der BITMARCK GmbH)*) issued on 23 June 2026; **(iii)** Certificate on the minimum number of 10 000 user identifications (111 677 between 1 January 2025 and 31 December 2025) for the digital identification during the digital bank account opening proccess (*Zertifikat über die Mindestanzahl von 10 000 Vorgängen für die Anwendung der digitalen Kontoeröffnung (der comdirect)*) issued on 23 June 2026; **(iv)** Certificate on the minimum number of 10 000 user identifications (271 607 between 1 January 2025 and 31 December 2025) on the 'identity-

		verification-as-a-service' platform by Idnow GmbH (*Zertifikat über die Mindestanzahl von 10 000 Vorgängen für die Anwendung der Identity-Verification-as-a-Service-Plattform (der Idnow GmbH))* issued on 23 June 2026; **(v)** Certificate on the minimum number of 10 000 user identifications (2 363 213 between 1 January 2025 and 31 December 2025) via the application by RINGFOTO GmbH & Co. KG enabling the transmission of ID photos (*Zertifikat über die Mindestanzahl von 10 000 Vorgängen für die Anwendung der Passbildübermittlung (der RINGFOTO GmbH & Co. KG)*) issued on 23 June 2026; **(vi)** Certificate on the minimum number of 10 000 user identifications (241 046 between 1 January 2025 and 31 December 2025) via the online application for the electronic registration of residence (*Zertifikat über die Mindestanzahl von 10 000 Nutzern für die Anwendung eWA – elektronische Wohnsitzanmeldung (Ummeldung)*) issued on 29 July 2026. The certificates for application cases (i)-(v) were issued by AUTHADA GmbH, which is the technical service provider behind the applications. The certificate for application case (vi) was issued by the *Senatskanzlei der Freien und Hansestadt Hamburg – Amt IT und Digitalisierung*, which is the operator of the service.
5	Links to the applications cases	(i) Website https://atruvia.de/; Application: https://www.volksbanking.de/ privatkunden/girokonto-und-bezahlen/produkte/girokonto/girokonto-online/girokonto-online-neukunde-einzelkonto.html#/produktinformationen (ii) Website: https://www.bitmarck.de/ ; Application: https://play.google.com/store/apps/details?id=de.dak.dak_app (iii) Website: https://www.comdirect.de/ ; Application: https://www.comdirect.de/cms/lp/eka-kundenabfrage.html (iv) Website: https://idnow.io/de/ ; Application: https://www.raisin.com/de-de/registration/step/welcome/?product=DBK107 (v) Website: https://ringfoto.de/ ; Application: https://alfo-passbild.com/fotografen-information/ ; App store: https://play.google.com/store/apps/details?id=de.authada.alfo (vi) Website: https://wohnsitzanmeldung.gov.de/ All links verified by Commission services as functioning on 18 August 2026.
6	Publication on the launch of an application case	https://www.digitale-verwaltung.de/SharedDocs/kurzmeldungen/Webs/DV/DE/2022/09_elektronische_wohnsitzanmeldung.html, Link verified by Commission services as functioning on 18 August 2026.

3. Analysis:

The justification and substantiating evidence provided by the German authorities covers all constitutive elements of the target.

Additional application cases. At least ten application cases for the identity ecosystem are available online with at least 10 000 users each.

Under target 109, four application cases using the electronic identification function (hereinafter referred to as *eID function*) were implemented: the online portal of the Federal Office of Justice (*Online-Portal des Bundesamt für Justiz),* the digital pension overview of the German Federal Pension Insurance Fund (*Deutsche Rentenversicherung*), the online portal of the German savings banks association (DSGV, *Sparkassen*), and the TK App by the large health insurance fund *Techniker Krankenkasse*, **all** of them with at least 10 000 users. These four applications continue to be online, as verified on 18 August 2026.

Under target 110, Germany presented evidence regarding six additional application cases.

i) **Atruvia AG** is an IT service provider which specialises in providing IT services in the banking sector, notably the cooperative banks (*Volks*- und *Raiffeisenbanken*). For the digital opening of a bank account, Atruvia has been using AUTHADA's online identification solution since October 2024, integrated into banking app VR SecureGo plus of the *Volks- and Raiffeisenbanken*. For the online identification, customers wanting to open a bank account need an NFC-compatible device, the app of their bank, as well as an electronic ID-card and PIN. The identification process is outlined on the example of *Volksbank Darmstadt Mainz* (evidence No. 3, page 5 onwards). To attest to the number of eID authentications undertaken to open a bank account via the system by Atruvia, AUTHADA GmbH issued a corresponding certificate (evidence No. 4).

ii) **BITMARCK** provides digital identification services for the statutory health insurance, ensuring compliance with the German legal requirement that, as of 1 November 2023, health insurance providers must provide a safe method of identification to their customers through an electronic identity verification procedure. The insurers such as DAK that has over 5 million insured members provide an app which is embedded in the BITMARCK SDK (software development kit) to provide the eID service implemented via the AUTHADA GmbH. To identify themselves, customers need an NCF-compatible device, the corresponding app such as the DAK app and an electronic ID card including the PIN code. The procedure was shown on the basis of the DAK app (evidence No. 3, page 15 onwards). To attest to the number of eID authentications undertaken using BITMARCK's application, AUTHADA GmbH issued a corresponding certificate (evidence No. 4).

iii) **comdirect,** a subsidiary of Commerzbank, provides an online identification service to open a bank account via AUTHADA GmbH. The service has been available to iOS-users since the third quarter of 2021. The identification service can be used to open both a brokerage account (*Depot)* and a checking account *(Girokonto)*. The eID service by AUTHADA is fully integrated in the comdirect app. To identify themselves, customers need an electronic ID card including the PIN code, an NCF-compatible device, and the comdirect app. The procedure is outlined via screenshots in the user manual (evidence No. 3, page 21 onwards). To attest to the number of eID authentications undertaken via the comdirect application, AUTHADA GmbH issued a corresponding certificate (evidence No. 4).

iv) **IDnow GmbH**, an identification service provider (or: Identity-Verification-as-a-Service (IVaasS) platform), added eID as an additional means of identification. The service was implemented by AUTHADA GmbH, who specialises in the eID-procedure using electronic identity cards. The service is either directly integrated in the app of the client using IDnow SDK, or as an IDnow Online Ident App. For the successful identification, users need the app, the electronic ID card (and the respective PIN) as well as an NFC-compatible smartphone. The procedure is explained on the example of Raisin SE, a client of IDnow (evidence No. 3, page 29 onwards). Since 2023, Raisin SE has provided the eID-procedure to its customers to digitally open a bank account. For this, Raisin SE is using IDnow. To attest to the number of

eID authentications undertaken with the IDnow application, AUTHADA GmbH issued a corresponding certificate (evidence No. 4).

v) **RINGFOTO GmbH & Co. KG**'s ID photo transmission app enables licensed photographers to safely transmit ID photos directly to the authorities concerned. This digital transmission is mandatory following a directive from the 1 May 2025, to ensure the safety of biometric ID photos and to protect them from manipulation. To use the app (alfo.passbild), photographers must register using an identification procedure (evidence No. 3, page 39 onwards). This includes declaring their company as well as the owner and all other employees. For this eID-procedure, the alfo.passbild app, the electronic ID card (and the PIN) and an NFC-compatible smart phone are needed. The alfo.passbild app is provided by AUTHADA GmbH for both the identification of photographers as well as the safe transmission of ID photos. To attest to the number of eID authentications undertaken to register within the alfo.passbild application, AUTHADA GmbH issued a corresponding certificate (evidence No. 4).

The Commission services conducted an on-the-spot check on 20 July 2026 to verify the number of authentications through the eID functionality of Atruvia AG, BITMARCK, comdirect, IDnow GmbH, and RINGFOTO GmbH & Co. KG between 1 January 2025 and 31 December 2025, and that the numbers of authentications are aligned between the statistical repository of authentications and the certificate issued by Germany (evidence No. 4 (i)-(v)). This check was completed successfully, confirming that an additional application case for the identity ecosystem with at least 10 000 users is available online. The websites of Atruvia AG, BITMARCK, comdirect, IDnow GmbH, and RINGFOTO GmbH & Co. KG, and the links to their respective applications such as Volksbank, DAK, comdirect, Raisin, and alfo,passbild were verified as being online and operational by the Commission services on 18 August 2026 (evidence No. 5 (i)-(iv)) and 19 August 2026 (evidence No. 5 (v)).

vi) **Elektronische Wohnsitzanmeldung (eWA)** is an electronic identification system for residence registration. The eWA uses the eID function to authenticate a citizen during the process of an electronic change of residence registration. It was developed by the *Freie und Hansestadt Hamburg* (represented by the *Senatskanzlei – Amt für IT und Digitalisierung*) and has been available to users in Hamburg since September 2022 (evidence No. 6). More Länder have been added successively since then, rendering the service available to citizens Germany-wide. The technical provider behind the application is *Dataport AöR*. The actual identification for this service takes place via BundID which is accessible with the ID card (evidence No. 1). To attest to the number of eID authentications undertaken via the eWA, the *Senatskanzlei der Freien und Hansestadt Hamburg* issued a corresponding certificate (evidence No. 4).

The Commission services conducted an on-the-spot check on 26 August 2026 to verify the number of authentications through the eID functionality of eWA between 1 January 2025 and 31 December 2025, and that the numbers of authentications are aligned between the statistical repository of authentications and the certificate issued by Germany (evidence No. 4 (vi)). This check was completed successfully, confirming that an additional application case for the identity ecosystem with at least 10 000 users is available online. The website of eWA was verified as being online and operational by the Commission services on 18 August 2026 (evidence No. 5 (vi)).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 115 Standardised technical system is ready to be connected with registers

Related Measure: 6.1.3 Digitalisation of the administration – modernisation of registers

Qualitative Indicator: The standardised technical system is ready to be connected with registers, the legal basis has entered into force, use cases have been connected to the technical system and additional connections to the technical system have been tested.

Time: Q2 2026

1. Context:

The objective of the measure is to enable a simple, secure and digital exchange of data stored in various German registers, to allow citizens and companies to submit their data only once. The measure consists of the standardised technical system (The National Once-Only Technical System, NOOTS) being ready to be connected with registers, the entry into force of the legal basis for connecting registers, the connection of use cases to the technical system and the testing of additional connections to the technical system within a readiness check.

Milestone 115 requires that the standardised technical system (National Once-Only Technical System, NOOTS) is ready to be connected with registers, that the legal basis for connecting registers has entered into force, that three use cases, each consisting of a register and an online service, have been connected to the technical system, and that for twelve additional registers and six additional online services, the connection to the technical system has been tested within a readiness check.

Milestone 115 is the second and last milestone of the reform. It follows the completion of milestone 114, related to the completion of a pilot project to test pilot registers, in accordance with the implementation of the Identification Number Act (*Identifikationsnummerngesetz*) and the Register Modernisation Act (*Registermodernisierungsgesetz*).

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the milestone (including all its constitutive elements, as set out in the description of the milestone and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	Copy of the Act on the Treaty on the Establishment, Operation and further Development of the National Once-Only-Technical System (NOOTS) – Treaty on the Implementation of Article 91c (1), (2) of the Basic Law – NOOTS State Treaty (*Gesetz zum Vertrag über die Errichtung, den Betrieb und die Weiterentwicklung des Nationalen Once-Only-Technical-Systems (NOOTS) – Vertrag zur Ausführung von Artikel 91c Absatz 1, Absatz 2 GG – NOOTS-Staatsvertrag)* and of the	The document contains two distinct legal instruments published together in the State Gazette: (i) The Act approving the NOOTS State Treaty (pages 1-2), which grants federal legislative approval to the Treaty. Pursuant to its article 2(1), the Act entered into force on 18 December 2025, the day following its promulgation. (ii) The NOOTS State Treaty (pages 3-7). The treaty sets out the governance, operational responsibilities, connection and use obligations, financing and the ratification and entry-into-force rules for NOOTS. It defines NOOTS as a joint information technology

	NOOTS State Treaty published with it in the State Gazette (part 1) No. 325 of 12 December 2025 (*BGBl. 2025 I Nr. 325 vom 17.12.2025*).	system enabling the retrieval and transmission of electronic evidence and data by public authorities. The Treaty also refers to the Annex to Section 1 of the Identification Number Act (*Identifikationsnummerngesetz*), which lists the bodies to be connected. It is available here: https://www.gesetze-im-internet.de/idnrg/anlage.html.
3	Copy of the Official Notice of the Entry into Force of the Treaty on the Establishment, Operation and Further Development of the National Once-Only-Technical System (NOOTS) – Treaty on the Implementation of Article 91c (1), (2) of the Basic Law – NOOTS State Treaty (*Bekanntmachung über das Inkrafttreten des Vertrags über die Errichtung, den Betrieb und die Weiterentwicklung des Nationalen Once-Only-Technical-Systems (NOOTS) – Vertrag zur Ausführung von Artikel 91c Absatz 1, Absatz 2 GG – NOOTS-Staatsvertrag*), published in the State Gazette (part 1) No. 35 of 4 February 2026 (*BGBl. 2026 I Nr. 35 vom 09.02.2026*).	The official notice, issued pursuant to Article 2(2), first sentence of the act on the NOOTS State Treaty, states that the NOOTS State Treaty, pursuant to Section 10, paragraph 1, sentence 2, entered into force on 1 February 2026.
4	Copy of the Status Report of the NOOTS Steering Group for submission to the 49th IT Planning Council in Rostock-Warnemünde (*Statusbericht der NOOTS-Umsetzungsorganisation: Zur Vorlage beim 49. IT-Planungsrat in Rostock-Warnemünde*) of 23 January 2026.	The report was adopted by the NOOTS Steering Group (*Steuerungsgruppe NOOTS*) on 23 January 2026 for submission to the 49th meeting of the IT Planning Council (*IT-Planungsrat*). It is published alongside Decision B-2026/09-IT, adopted by the IT Planning Council at its 49th meeting on 18 March 2026. The report describes the implementation progress of the NOOTS during the period from October 2025 to January 2026.
5	Link to IT Planning Council Decision B-2026/09-IT (49th meeting, 18 March 2026) and NOOTS Status Report	Link to IT Planning Council Decision B-2026/09-IT, adopted at its 49th meeting on 18 March 2026. The NOOTS Status Report is published on the same webpage: https://www.it-planungsrat.de/beschluss/b-2026-09-i.
6-11	NOOTS-Readiness-Check - Confirmation of a successful retrieval of verification data on the NOOTS reference environment (*NOOTS-Readiness-Check – Bestätigung eines erfolgreichen Nachweisdatenabrufs auf der NOOTS Referenzumgebung*) for the three use cases	Six certificates issued by the Federal Office of Administration (*Bundesverwaltungsamt,* hereinafter referred to as 'BVA') confirming that a NOOTS readiness check was completed for the three use cases, each consisting of a register and an online service. The certificates show that the readiness checks were conducted between 2 July 2025 and 12 February 2026.
12-38	NOOTS-Readiness-Check - Confirmation of a successful retrieval	27 certificates issued by BVA confirming that a NOOTS Readiness Check was completed for 17

	of verification data on the NOOTS reference environment for the additional readiness checks	additional registers and 10 additional online services. The certificates show that the readiness checks were conducted between 4 April 2025 and 7 July 2026.
39	Overview of the connection and readiness status of registers and online services (NOOTS '*Anbindungspipeline'*)	Spreadsheet listing 21 registers (data providers) and 13 online services (data consumers) and indicating their status in the NOOTS reference and production environments. It shows four use cases for which both the register and the online service are connected to the production environment, as well as one additional register connected to production. In the reference environment, 15 registers and 9 online services are indicated as completed, corresponding to those which have passed the NOOTS Readiness Check, while one additional register is indicated as ongoing. The spreadsheet also provides, for each of the 13 online services, a link to the related webpage.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

The standardised technical system (National Once-Only Technical System, NOOTS) is ready to be connected with registers.

Adopted via a decision by the IT Planning Council on 23 January 2026, the Status Report of the NOOTS Implementing Organisation (Evidence No. 4) states on page 4 that "[a] first version of the NOOTS (MVP) has been implemented as planned and has been ready for use since December 2025. The NOOTS-MVP has successfully enabled the fast connection of NOOTS Use Cases and shall be iteratively scaled in 2026. Following the entry into force of the NOOTS Network Regulation on 6 January 2026, the system went live successfully". The report defines NOOTS as the National Once-Only Technical System (National Once-Only-Technical-System) (Evidence No. 4, page 3).

The report is publicly available on the webpage of the IT Planning Council (Evidence No. 5). The Commission services accessed the link provided by the authorities on 27 August 2026 to verify that the report has been adopted and is publicly available. This check was completed successfully.

In particular, the report outlines that the technical system is ready for use, meaning that the system encompasses all "necessary features required for secure and data protection-compliant data exchange" (Evidence No. 4, page 4). Furthermore, as explained below, the connection of first use cases demonstrates that real data can be exchanged between a connected register and a respective online service via the technical system. The readiness check certificates issued by the Federal Office of Administration (Evidence No. 6-38) further support the requirement that the technical system is ready to be connected with registers. They confirm successful data retrieval in the NOOTS reference environment for registers and online services, as detailed below.

This confirms that the standardised technical system, implemented as the National Once-Only Technical System, NOOTS, is ready to be connected with registers.

The legal basis for connecting registers has entered into force.

The Act on the Treaty on the Establishment, Operation and further Development of the National Once-Only-Technical System (NOOTS) – Treaty on the Implementation of Article 91c (1), (2) of the Basic Law – (hereinafter referred to as 'Act approving the NOOTS State Treaty') (Evidence No. 2) was published in the State Gazette (*Bundesgesetzblatt*) (part I) No. 325 of 17 December 2025. According to its article 2, the Act approving the NOOTS State Treaty entered into force on 18 December 2025. This legal act approves the Treaty on the Establishment, Operation and further Development of the National Once-Only Technical System which is published together with the act (hereinafter referred to as 'NOOTS State Treaty').

Furthermore, pursuant to Article 2(2), first sentence of the act, the Official Notice of the Entry into Force of the NOOTS State Treaty was published in the State Gazette (part I) Nr. 35 on 9 February 2026 (Evidence No. 3). The Official Notice states that the NOOTS State Treaty, pursuant to its Section 10, paragraph 1, sentence 2, entered into force on 1 February 2026.

The NOOTS State Treaty (Evidence No. 2) is a Treaty of the 16 States (*Länder*) and the Federal Republic of Germany (hereinafter referred to as 'contracting parties'). The treaty establishes the NOOTS as a joint information technology system for the retrieval and transmission of electronic evidence and data by public authorities (Evidence No. 3, section 1 and 2). Section 5 of the NOOTS State Treaty (Evidence No. 2, section 5 – Connection and Use of the NOOTS (*Anschluss und Nutzung des NOOTS*)) provides for the obligation to the contracting parties, for the purpose of providing administrative services in accordance with the Online Access Act to "make evidence from evidence-providing bodies available via the NOOTS" (paragraph 1(a)) and to use the NOOTS for both evidence-providing and evidence-requesting bodies (paragraph 1(c)). Importantly, for the purpose of the State Treaty, evidence should be understood as documents and data in electronic form that are suitable for the establishment of facts within administrative procedures (section 2, paragraph 2(2)). Furthermore, Section 5, Paragraph 2, states that the evidence-providing bodies to be connected pursuant to Section 5, Paragraph 1(a) are listed in the annex to section 1 of the Identification Number Act (*Identifikationsnummerngesetz*) of 28 March 2021 (Federal Law Gazette I page 591; 2023 | No. 230), as last amended by Article 8f of the Act of 19 July 2024 (Federal Law Gazette 2024 | No. 245), and that these and additional public registers are to be connected according to the provisions in Section 9 of the Treaty.

The entry into force of the NOOTS State Treaty on 1 February 2026 therefore confirms that the legal basis for connecting registers has entered into force.

Three use cases, each consisting of a register and an online service, have been connected to the technical system.

Germany provided a list of three use cases, each consisting of a register and an online service, connected to the technical system (Evidence No. 1). For each of the three registers and three online services covered by these use cases, Germany provided certificates entitled 'NOOTS-Readiness-Check – Confirmation of a successful retrieval of verification data on the NOOTS reference environment' (Evidence No. 6-11). These certificates specify the title of the use case and whether the certificate is issued for a 'data consumer' (*nachweisanfordernde Stelle*) or a 'data provider' (*nachweisliefernde Stelle*), entities defined in paragraph 2(3) and (4) of the NOOTS State Treaty and paragraph 5 linking them to the provision of administrative services under the Online Access Act and to registers under the IDNrG (Evidence No. 2). All certificates have been issued by the Federal Office of Administration (*Bundesverwaltungsamt*, hereinafter referred to as 'BVA'). The readiness checks

were conducted between 2 July 2025 and 12 February 2026. The certificates demonstrate that the three registers and the three corresponding online services associated with the use cases are ready to be connected to the NOOTS. Moreover, the summary document (Evidence No. 1) provided by Germany contains three weblinks to the online services underlying the three use cases. Commission services accessed the links provided by the authorities on 27 August 2026 to verify the validity of the links. This check was completed successfully.

Commission services conducted three on-the-spot checks on 9 June 2026, 15 July 2026, and 11 August 2026, during which Germany demonstrated on screen the application process (*Antragsstrecke*) underlying each use case, including the automatic retrieval of real data from the respective register (data provider) into the online service (data consumer). These checks were conducted to verify that each of the three use cases is connected to the technical system, as demonstrated by the retrieval of data from the register for the purpose of completing the online application (*Antrag*).

These checks were completed successfully, confirming that the requirement of the milestone that three use cases have been connected to the technical system has been met.

For twelve additional registers and six additional online services, the connection to the technical system has been tested within a readiness check.

Germany has provided 27 certificates entitled 'NOOTS-Readiness-Check – Confirmation of a successful retrieval of verification data on the NOOTS reference environment' (Evidence No. 12-38). 17 certificates concern registers (data providers), while 10 concern online services (data consumers), and all have been issued by the BVA. The readiness checks were conducted between 4 April 2025 and 7 July 2026. Each certificate states that the data retrieval within the NOOTS reference environment has been successfully completed, thereby confirming that a connection to the NOOTS has been tested for 17 registers and 10 online services. These registers and online services are considered 'additional' because the titles indicated in the certificates show that none of them forms part of the three use cases already connected to the production environment of the technical system, as outlined above. In addition to the certificates, Germany provided an overview of the connection and readiness status of registers and online services (Evidence No. 39), including their status in the reference and production environments and links to the online services.

According to the evidence provided, Germany therefore completed readiness checks for 17 additional registers and 10 additional online services, thus exceeding the milestone requirement of 12 additional registers and six additional online services by five registers and four online services, respectively.

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 123 Publication of a funding guide

Related Measure: 6.2.2 Expansion of consulting services of PD – Berater der öffentlichen Hand GmbH

Qualitative Indicator: Funding Guide of the Federal Ministry of Finance published

Time: Q2 2026

1. Context:

The objective of this reform is to enable municipalities and other public entities to better integrate public funding programmes into their investment projects, as well as advance the rollout of IT investments in schools. The measure consists in consulting work supporting municipalities and other public entities in navigating funding programmes, creating consulting concepts for the digitalisation of schools and advise school authorities.

Milestone 123 concerns the publication of a Federal Ministry of Finance Funding Guide on how to design public funding programmes for public infrastructure measures.

Milestone 123 is part of the final step in the implementation of the reform along with target 124, related to consultations on funding programmes for public bodies, which follow the completion of target 122, related to creating concepts for revisions of existing funding programmes; milestone 120, related to the start of Partnerschaft Deutschland consulting services for selected funding programmes; target 121, related to giving consultations to funding recipients; target 125, related to pilot consulting projects on school IT; milestone 126, related to creating a model concept for school IT; and target 127, related to providing consultations on school IT.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the milestone (including all its constitutive elements, as set out in the description of the milestone and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Weblink to the online funding guideline	Link to the funding guideline, published on the website in January 2026 by the German Federal Ministry of Finance and the contractor (Partnerschaft Deutschland) (all links verified by Commission services on 22 May 2026)*:* https://www.foerderleitfaden.bund.de/DE/Startseite/startseite_node.html i. Glossar (Glossary): https://www.foerderleitfaden.bund.de/DE/Service/Glossar/_functions/glossar.html?lv2=119664 ii. Langversion Baustein 2 (Long version of building block 2): https://www.foerderleitfaden.bund.de/SharedDocs/Downloads/DE/Modul_6/ZuW_Baustein_2_Langversion_zum_Download.pdf iii. Arbeitshilfe – Checkliste Beihilferecht (working aid – checklist state aid law: https://www.foerderleitfaden.bund.de/SharedDocs/Downloads/DE/Modul_8/Checkliste_Beihilferechtliches_Pruefverfahren.pdf?__blob=publicationFile&v=3

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

Publication of a Federal Ministry of Finance Funding Guide...

The funding guide, published in January 2026, is made available through a public website (Evidence No. 2). As stated on the website, it was developed by the German Federal Ministry of Finance (hereinafter referred to as the BMF) in collaboration with Partnerschaft Deutschland - Berater der öffentlichen Hand GmbH, a public sector consultancy firm owned mostly by the German federal state and Regions (*Länder*), hereinafter referred to as PD.

...on how to design public funding programmes...

The Funding Guide is structured into eight thematic modules, which focus on different aspects of designing public funding programmes:

i. Guideline Development Process: Provides a detailed overview of the entire process of preparing a funding regulation.
ii. Conceptual Design: Covers the fundamentals of conducting needs assessments, including stakeholder involvement, and the conceptual structuring of funding programmes.
iii. Economic Efficiency: Offers a standardised methodology for conducting economic efficiency analyses for funding programmes.
iv. Managing Authorities: Provides guidance for cooperation with administrative bodies.
v. Funding Regulation: A tool for drafting funding guidelines in accordance with national legislation.
vi. Objectives and Impact Orientation: Focuses on the changes that a funding programme is intended to achieve, including planning and monitoring arrangements.
vii. Information and Advisory Services: Offers guidance for stakeholder-oriented communication during the implementation of funding programmes.
viii. Legal Framework: Provides an overview of the legal provisions relevant to the preparation of funding guidelines.

In total, the modules provide 65 guidance documents, for example checklists, graphs, presentations and other explanation documents. The Commission services accessed the link provided by the authorities on 22 May 2026 to view and download all materials provided in the modules (under the section “downloads”) and verified them as being available. This check was completed successfully, confirming that, together, these modules and documents form a Funding Guide by the German Federal Ministry of Finance on how to design public funding programmes.

...for public infrastructure measures.

Based on the descriptions in the documents from the Funding Guide (for example in the guidance documents on possible goals for the funding, how to measure cost-effectiveness and which relevant legal bases to draw from), Commission services confirmed that these guidelines are meant to be used to develop a funding programme for public goods or services. This includes public infrastructure, as is evidenced by the relevant references to different kinds of public infrastructure, such as sports, cultural or local infrastructure. Commission services found these references throughout the different guidance documents available on the Funding Guide website, such as in pages 9-10 of the glossary of the Funding Guide (Evidence No. 2-i), on page 23 of ‘Langversion Baustein 2’ in Section 6 (Evidence No. 2-ii) or page 8 of ‘Arbeitshilfe – Checkliste Beihilferecht’ in Section 8 (Evidence No. 2-iii) (all links verified on 22 May 2026).

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 124 Consultation certificates issued

Related Measure: 6.2.2 Expansion of consulting services of PD – Berater der öffentlichen Hand GmbH

Quantitative Indicator: number of consultation certificates issued

Baseline: 100

Target: 400

Time: Q2 2026

1. Context:

The objective of this reform is to enable municipalities and other public entities to better integrate public funding programmes into their investment projects, as well as advance the rollout of IT investments in schools. The measure consists in consulting work supporting municipalities and other public entities in navigating funding programmes, creating consulting concepts for the digitalisation of schools and advising school authorities.

Target 124 concerns the issuance of certificates for the conclusion of consultations.

Target 124 is part of the final step in the implementation of the reform together with milestone 123, related to the publication of a funding guide on how to design public funding programmes, which follow the completion of target 122, related to creating concepts for revisions of existing funding programmes; milestone 120, start of Partnerschaft Deutschland consulting services for selected funding programmes; target 121, related to giving consultations to funding recipients; target 125, related to pilot consulting projects on school IT; milestone 126, related to creating model concept for school IT; and target 127, related to providing consultations on school IT.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	General overview (*Gesamtübersicht*)	Excel file with a list of all the institutions that received consultation from Partnerschaft Deutschland - Berater der öffentlichen Hand GmbH (hereinafter referred to as "PD") under this project. For each entry, the file includes a unique project identifier, name of the recipient of consultation, a confirmation that the consultation was completed and a description of the content of the consultations.
3	477 copies of documents confirming completion of consultation (*Beratungsbestätigung*), ranging from "Beratungsbestätigung EXT-3010" to "Beratungsbestätigung EXT-1007" (Signed by PD and the recipients of funding	Confirmation that the consultations were completed, signed by the German Federal Ministry of Finance (hereinafter referred to as the BMF) and PD.

	between June 2023 and December 2025)	
4	Copy of the contract for the first phase (*IBA-DARP-Vertrag – Phase 1*) signed on 21 September 2021	The contract signed by the BMF and PD on the implementation of the first phase of measure 6.2.2 of the DARP, concerning the consultation programme "*Investitionsberatung für lebenszyklus-und wirkungsorientierte Beschaffung*" (hereinafter referred to as IBA) in the framework of the German Recovery and Resilience Plan ("*Deutscher Aufbau und Resilienzplan",* hereinafter referred to as DARP).
5	Copy of the contract for the second phase (*IBA-DARP-Vertrag – Phase 2*) signed on 07 July 2022.	The contract between the BMF and PD on the implementation of the second phase of measure 6.2.2 of the DARP.
6	*Copy of PD consultation offerings communication (PD Beratungsangebot komm. Institutionen)*	A presentation given on 25 March 2024 by PD on the consultation services that they provide to the beneficiaries of funding from the selected funding programmes.
7	Copy of signed document for the consultation relating to the funding programme GAK-ILE (*Nachweis Identifikation Förderprogramm GAK-ILE*) (signed on 26 September 2022)	A signed document by both the Federal Ministry for Food and Agriculture and PD confirming that the consultation programme "*Gemeinschaftsaufgabe Agrarstruktur und Küstenschutz Integrierte ländliche Entwicklung* – GAK-ILE" was jointly identified as suitable for measure 6.2.2.
8	Copy of signed document for the consultation relating to the funding programme BULE (*Nachweis Identifikation Förderprogramm BULE*) (signed on 26 september 2022)	A signed document by both the Federal Ministry for Food and Agriculture and PD, confirming that the consultation programme "*Bundesprogramm Ländliche Entwicklung – BULE"* was jointly identified as suitable for measure 6.2.2.
9	Copy of signed document for the consultation relating to the funding programme KFN (*Nachweis Identifikation Förderprogramm KFN*) (signed on 14 November 2022)	A signed document by both the Federal Ministry for Housing, Urban Development and Building and PD, confirming that the consultation programme "Klimafreundlicher Neubau – KFN" was jointly identified as suitable for measure 6.2.2.
10	Copy of signed document for the consultation relating to the funding programme Urban development (*Nachweis Identifikation Förderprogramm Städtebauförderung*) (signed on 16 December 2022)	A signed document by both the Federal Ministry for Housing, Urban Development and Building a, confirming that the consultation programme "*Städtebauförderung"* was jointly identified as suitable for measure 6.2.2.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

For at least 400 consultations, a certificate of conclusion of consultations (signed by the beneficiary) has been issued.

The BMF contracted Partnerschaft Deutschland - Berater der öffentlichen Hand GmbH (hereinafter referred to as "PD") to provide consultation services to beneficiaries of public funding programmes. PD is a public sector consultancy firm owned mostly by the German federal state and Regions

(*Länder*). The funding beneficiaries are municipalities and other public bodies. PD committed to carry out consultations with recipients of funding from each of four identified funding programmes, namely the Joint Task of Agricultural Structure and Coastal Protection - Integrated Rural Development (GAK-ILE), the Federal Programme on Rural Development (BULE), Climate Friendly Construction (KFN) and Urban Development Funding (*Städtebauförderung)*. This is evidenced by four confirmation documents signed by PD and the respective competent Ministries (Evidence No. 6-10).

Germany provided an Excel file containing a list of the 477 consultations that PD delivered to the beneficiaries of the four funding programmes (Evidence No. 2). This list contains the first 100 consultations that had been started under target 121, plus an additional 377 consultations. For each project, the Excel list gives the following information: the unique project identification reference, the name of the project, the recipient of the consultation, the status of the consultations (all were marked as "completed" at this stage) and a description of the provided services. According to the Excel list (evidence No. 2), PD provided 477 consultations to funding programme beneficiaries, thus exceeding the goal of target 124 by 77.

For each of the 477 units in the overview, Germany also provided a confirmation of completion of consultation services, signed by PD and by the beneficiary (Evidence No. 3). By checking each of these confirmations, Commission services confirmed that the name of the beneficiary and the name of the consultation project correspond to those from the Excel list. By checking the "timeframe for consultations" mentioned on each these documents, it was also confirmed that the consultation took place between May 2022 to December 2025.

Furthermore, in line with the description of the measure, the **consulting work** should **support municipalities and other public entities in navigating funding programmes.**

The contracts signed by the BMF and PD (Evidence No. 4 and No. 5) specify the timeframe, intended type of recipients and foreseen content for these consultations. Germany provided a presentation from PD on the consultation services that they provide (Evidence No. 6), which shows the content of these consultations and the target audience which are municipalities and public entities. Furthermore, Commission services checked the recipient's name and the description of the provided consultation services in each of the 477 certificates of completion of consultations and verified that the consultations indeed focused on supporting municipalities or other public entities in navigating funding programmes.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 130 Grants awarded for individual renovation measures for energy- efficient buildings

Related Measure: 7.1.1 Building renovation: federal funding for energy-efficient buildings

Quantitative Indicator: Grants awarded for individual renovation measures

Baseline: 145 000

Target: 335 000

Time: Q2 2026

1. Context:

The objective of this measure is to scale up investment 1.3.3 'Building renovation: federal funding for energy-efficient buildings' under Component 1.3. The scaled-up part of the measure consists of supporting 190 000 individual renovation measures, in addition to those financed from the non-repayable support as part of the investment 1.3.3. Moreover, support extends to a 10% funding bonus for exchanging functioning oil/coal-based heating and gas boilers that are older than 20 years.

Target 130 requires that grants shall be awarded for 335 000 individual renovation measures.

Target 130 is the only target of investment 7.1.1 Scaled-up investment: Building renovation: federal funding for energy- efficient buildings.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	List of 230 153 completed individual renovation measures	This document shows a list of 230 153 completed individual renovation measures, indicating the type of measure and the amount paid by the implementing institution (BAFA).
3	Sample	For each of the 62 units, certificates of renovation actions (*Zuwendungsbescheid and Festsetzungsbescheid*), and for renovation actions including a heating exchange bonus (*Heizungs-Tausch-Bonus)*, a specialised entrepreneur declaration (*Fachunternehmererklärung*) proving that the replaced heating device's commissioning/start of operation dates back at least 20 years at the time of application for the renovation.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

Grants shall be awarded for 335 000 individual renovation measures. Furthermore, in line with the description of measure **the scaled-up part of the measure consists of supporting 190 000 individual renovation measures, in addition to those financed from the non-repayable support as part of the investment 1.3.3.**

The implementing institution (Federal Office for Economic Affairs and Export Control, hereinafter referred to as 'BAFA') is in charge of monitoring and reporting the number of completed individual measures, on the basis of which the grants are awarded. The baseline for the target of 335 000 measures is 145 000. 145 000 renovation measures by private individuals for the renovation of residential buildings were already provided for target 48B under the 3rd payment request.

The German authorities provided a list of 230 153 completed individual renovation measures (Evidence No. 2). For each measure, the list specifies the type of measure and the amount paid by the implementing institution (BAFA). Following the selection of a random sample of 62 units, Germany submitted a certificate of completion of renovation actions (*Festsetzungsbescheid*), confirming the completion of individual renovation measures, such as the installation of new biomass heating systems, solar collectors, and electric heat pumps, as well as the renovation of building envelopes and the installation of new ventilation systems and the grant decision (*Zuwendungsbescheid*), demonstrating that renovation measures had been completed, for each sampled unit. Two additional units were added to the sample (meaning 62 units instead of 60), to ensure that all types of measures were covered in the sample. The evidence provided for a sample of 62 units (Evidence No. 3) confirmed that the requirements of the target, which is grants awarded for an additional 190 000 individual renovation measures, have been met. According to the evidence provided, Germany awarded grants for 230 153 renovation measures, thus exceeding the goal of target 130 (financial support in the form of grants for additional 190 000 individual renovation measures) by 40 153.

In line with the description of measure 1.3.3 of which measure 7.1.1 is a scale-up, the measure shall focus on support to the energy-efficient renovation of residential buildings through individual measures also including a 10% funding bonus for exchanging functioning oil/coal-based heating and gas boilers that are older than 20 years.

To promote a faster phase-out of fossil-fuel powered heating systems, an incentive was put in place to invest in efficient systems based on renewables, consisting in the exchange of still-functioning fossil-fuel powered systems. This incentive consisted of a bonus of 10% extra subsidy funding (see preliminary assessment of target 48B for further details). A total of 21 units within the randomly selected 62 sample were subject to a 10% bonus. A specialised entrepreneur declaration (*Fachunternehmererklärung*, part of Evidence No. 3) was issued in line with the guidelines for federal funding for energy-efficient buildings— individual measures (*Richtlinie für die Bundesförderung für effiziente Gebäude - Einzelmaßnahmen (BEG EM)*). This declaration confirms that the replaced heating device's commissioning/start of operation dates back at least 20 years at the time of application for the renovation.

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Target: 132 Zero- emission commercial vehicles and recharging stations

Related Measure: 7.1.2 Support programme for light- and heavy-duty zero-emission transport

Quantitative Indicator: Zero-emission commercial vehicles

Baseline: 670

Target: 2 139

Time: Q2 2026

1. Context:

The objective of this measure is to increase zero emission road transport. The measure consists in the registration of zero-emission commercial vehicles and the commissioning of electric charging stations.

Target 132 requires that 1139 zero-emission vehicles, including at least 529 vehicles of class N3, have been registered and commissioning certificates (*Inbetriebnahmeprotokolle*) have been issued for 1000 electric charging stations. The registered vehicles may include vehicles purchased and rented.

Target 132 is the second and last target of the investment, and it follows the completion of target 131, related to the registration of 670 zero-emission commercial vehicles, including at least 190 vehicles of class N3.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary Document	Summary document duly justifying how the target (including all its constitutive elements, as set out in the description of the target and of the corresponding measure in the CID annex) has been satisfactorily fulfilled.
2	List of vehicles and charging stations	A spreadsheet containing a list of 563 vehicles and 1096 charging stations supported under this measure. For each vehicle, the list provides i) official references of the vehicle, ii) official references of the grant decision, iii) the license plate and iv) the vehicle class (N1, N2, N3). For each charging station, the list provides i) official references of the charging station, ii) official references of the grant decision, iii) the location and iv) the model of the charging station.
3	Sample of 60 units	For the part of the sample of 21 zero-emission vehicles: a) a copy of the relevant grant decision (*Bewilligungsbescheid*) supporting the purchase b) a copy of the registration document for the vehicle (*Zulassungsbescheinigung*), which includes the information on the type of the vehicle showing that it is a zero-emission vehicle according to the fuel code (Kraftstoffcode) and the EC class of vehicle (N1, N2 or N3) c) a copy of the funding settlement decision (*Abrechnungsbescheid*) connecting the grant decision to the registration document.

		For the part of the sample of 39 charging stations: a) a copy of the grant decision (*Zuwendungsbescheid*) issued for the charging station(s) b) a copy of the commissioning certificate (*Inbetriebnahmeprotokoll*) c) a copy of relevant invoice / order / order confirmation indicating the model and/or location of the charging station (in cases where the documents under b) did not contain information about the location or model of the charging station(s)).

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the target.

1139 zero-emission vehicles, including at least 529 vehicles of class N3, have been registered …

Germany submitted a spreadsheet containing 563 zero-emission commercial vehicles (Evidence No. 2). Out of the 563 zero-emission commercial vehicles, 392 vehicles belong to the N3 classification.

Target 132 is the final target of measure 7.1.2, following the satisfactory fulfilment of target 131. The baseline for target 132, established by the fulfilment of target 131, consists in 670 zero-emission commercial vehicles, including 200 vehicles of class N3. According to the evidence provided, Germany demonstrated the registration of an additional 563 zero-emission commercial vehicles, including 392 vehicles of N3 classification, bringing the total number of registered vehicles to 1233 and the number of registered class N3 vehicles to 592, thus exceeding the goal of target 132 by 94 zero-emission vehicles, including 63 vehicles of class N3.

Following the selection of a random sample of 60 units, Germany submitted, for the 21 sample units that are zero-emission commercial vehicles: a copy of the relevant grant decision (*Bewilligungsbescheid*) supporting the purchase; a copy of the registration document for the vehicle (*Zulassungsbescheinigung Teil 1)*, which includes the information on the type of the vehicle showing that it is a zero-emission vehicle according to the fuel code (*Kraftstoffcode*) and the EC class of vehicle (N1, N2 or N3), and a copy of the funding settlement decision (*Abrechnungsbescheid*) to demonstrate the payment for the vehicles has been executed (Evidence No. 3).

The evidence provided for the sample of 21 zero-emission commercial vehicles confirmed that the requirements of the target have been met. For each vehicle in the sample, a full set of individual documentation was reviewed. This set included:

i) The grant decision identifying the name of recipient, reference to the call for funding, eligibility date, funding ID, the vehicle type (purely electric) and category (N1, N2 or N3);

ii) the vehicle registration certificate, providing conclusive proof of registration and verifying the zero-emission status via the fuel code, as well as the vehicle category, vehicle identification number and license plate;

iii) the funding settlement decision, confirming that the vehicle was purchased in accordance with the criteria in the grant decision and providing the vehicle identification number, category of vehicle and license plate, which were cross-checked by Commission services with the vehicle registration certificate, along with the recipient's name, which was cross-checked by Commission services with the grant decision.

The Commission services verified that the vehicles were not registered before February 2020, by checking the dates mentioned on the grant decision and on the vehicle registration certificate.

… and commissioning certificates (*Inbetriebnahmeprotokolle*) have been issued for 1000 electric charging stations.

Germany submitted a spreadsheet containing 1096 electric charging stations (Evidence No. 2).

Following the selection of a random sample of 60 units, Germany submitted, for the 39 sample units concerning an electric charging station, a copy of the relevant grant decision (*Bewilligungsbescheid*) supporting the purchase and a copy of the commissioning certificate (*Inbetriebnahmeprotokoll)* of the specific charging station. For charging stations where the latter did not include any information about the location or model of the charging station(s), a copy of an invoice, order or order confirmation indicating the model and/or location of the charging station was also provided to enable linkage (Evidence No. 3).

The evidence provided for a sample of 39 units concerning electric charging stations confirmed that the requirements of the target have been met. For each charging station in the sample, a full set of individual documentation was reviewed. This set included:

i) The grant decision identifying the grant beneficiary, reference to the call for funding, eligibility date, funding ID and type of charging station;

ii) the commissioning certificate, proving that the charging station was put into operation and including signature and date. Furthermore, it included the name of the grant recipient, as well as model and location of the charging station, which were cross-checked by Commission services with the grant decision;

iii) an invoice, order or order confirmation, including the model and/or location of charging station, provided in the 29 cases where the information was not included in the commissioning certificate. A total of 12 invoices and 17 order confirmations was provided. This information was cross-checked by Commission services with the commissioning certificate and the grant decision as needed.

The Commission services verified that the charging stations were not commissioned before February 2020, by checking the dates mentioned on the grant decision and on the commissioning certificates.

The registered vehicles may include vehicles purchased and rented.

All vehicles sampled for the fulfilment of the target were purchased, as evidenced by the funding settlement decisions (Evidence No. 3).

On this basis, the Commission has reasonable assurance that this target has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled

Number and name of the Milestone: 135 Platform enabling the digital processing of authorisation requests for the hydrogen core network

Related Measure: 7.1.3 [REPowerEU] Digital platform for processing authorisation requests for the hydrogen core network

Qualitative Indicator: Digital platform for processing authorisation requests for the hydrogen core network

Time: Q4 2025

1. Context:

The objective of this investment measure is to accelerate the planning and approval process of energy infrastructural projects for the hydrogen core network. The measure consists in a digital platform that processes authorisation requests for the hydrogen core network, for example through automated completeness and plausibility checks or drafting proposals for justifications and approval decisions.

Milestone 135 is related to the development and functioning of a digital platform for processing authorisation requests for the hydrogen core network, for example through automated completeness and plausibility checks or drafting proposals for justifications and approval decisions.

Milestone 135 is the only milestone of this investment.

2. Evidence provided:

	Name of the evidence	Short description
1	Summary document	Summary document duly justifying how the milestone (including all the constitutive elements, as set out in the description of the milestone and of the corresponding measure in the CID Annex) has been satisfactorily fulfilled.
2	Verwaltungsvereinbarung Bund Hamburg	Administrative agreement signed on 13 and 14 November 2024 between the federal government represented by the Federal Ministry of the Interior and Community (*Bundesministerium des Innern und für Heimat*, hereinafter referred to as "BMI") and the federal state Hamburg on the implementation of the cooperation project for the DiPlan Platform.
3	HH Übersicht Arbeitspakete	Communication dated 25 November 2025 by the Department of Urban Development and Housing of the Free and Hanseatic City of Hamburg (*Freie und Hansestadt Hamburg, Behörde für Stadtentwicklung und Wohnen*) describing the implementation and status of the agreed nine work packages (*Arbeitspakete*) between the two cooperation partners.
4	Meilensteinplan DiPlan Integration	Project overview by PricewaterhouseCoopers (hereinafter referred to as "PwC") dated 16 January 2026, showing the successful AI integrationover the period of 17 November 2025 to 16 January 2026.
5	Einzelauftrag Leistungsphase	Contract between the service provider PwC and the Federal Ministry for Digital Transformation and Government Modernisation (*Bundesministerium für Digitales und*

		Staatsmodernisierung, hereinafter referred to as "BMDS") for the final service phase ("Leistungsphase") with signature of 10 December 2025 for the commissioning of services during the implementation and operating phase of the digital platform.
6	DiPlanung KI-Integration UserJourney	Comprehensive user journey of March 2026 by the Department of Urban Development and Housing of the Free and Hanseatic City of Hamburg, explaining step by step how the end-to-end platform for the planning and approval process (DiPlanung) functions for applicants and assessing authorities.
7	Benutzerhandbuch SPARK	User manual issued by BMDS on 29 May 2026 for SPARK, the AI-powered assistance solution for complex planning and permitting processes in the digital platform.
8	SPARK Workflow Click Path	Click path dated 19 May 2026 by BMDS explaining step by step the functioning of the SPARK module for the authorities involved in processing hydrogen core network applications.
9	https://h2.diplanung.de/ http:/vorhaben.diplanung.de/	Weblinks (verified as accessible by Commission services on 10 July 2026 and 18 September 2026) for submitting applications to the hydrogen core network via the digital platform.
10	https://opencode.de/de/software/spark-workflow-10117	Weblink (verified as accessible by Commission services on 10 July 2026 and 18 September 2026): General website to the open-source code of SPARK.
11	https://gitlab.opencode.de/bmds/planungs-und-genehmigungsbeschleunigung/spark-workflow/-/blob/main/docs/Technischer_Produktsteckbrief_GER_v1.pdf?ref_type=heads	Weblink (verified as accessible by Commission services on 10 July 2026 and 18 September 2026): Description of the technical architecture of SPARK.
12	https://gitlab.opencode.de/bmds/planungs-und-genehmigungsbeschleunigung/spark-workflow/-/tree/main/docs/system-architecture?ref_type=heads	Weblink (verified as accessible by Commission services on 10 July 2026 and 18 September 2026): Description of the system architecture of SPARK.
13	https://gitlab.opencode.de/bmds/planungs-und-genehmigungsbeschleunigung/spark-workflow/-/blob/main/docs/feature-list-ger.md?ref_type=heads	Weblink (verified as accessible by Commission services on 10 July 2026 and 18 September 2026): Functionalities and features of SPARK in German language.
14	https://gitlab.opencode.de/bmds/planungs-und-genehmigungsbeschleunigung/spark-workflow/-/blob/main/docs/feature-list-en.md?ref_type=heads	Weblink (verified as accessible by Commission services on 10 July 2026 and 18 September 2026): Functionalities and features of SPARK in English language.
15	https://bmds.bund.de/aktuelles/pressemitteilungen/detail/deutschland-gewinnt-internationalen-ki-preis	Weblink (verified as accessible by Commission services on 10 July 2026 and 18 September 2026) to the press release of 4 February 2026 for winning an international prize with its digital platform.

16	Bestätigung KPMG Law	Confirmation letter dated 17 September 2026 by KPMG Law in their function as reviewer and acceptor for the digital platform that it was operational and functional by 26 August 2026.
17	Auftragserteilung und Beauftragungsschreiben KPMG Law	Contracting of KPMG Law by the federal government (BMI and BMDS) dated 10 March 2025 and 6 February 2026 for providing review, advisory and acceptance services regarding the development of the digital platform.

3. Analysis:

The justification and substantiating evidence provided by the German authorities cover all constitutive elements of the milestone.

The digital platform processes authorisation requests for the hydrogen core network, for example through automated completeness and plausibility checks or drafting proposals for justifications and approval decisions.

The development of the digital platform for processing authorisation requests for the hydrogen core network has been based on a cooperation agreement between the federal government and the state of Hamburg that was signed on 13 and 14 November 2024 (Evidence No. 2). Under the cooperation agreement the state of Hamburg agreed to provide its existing "DiPlanPlattform" and to further develop it for the purposes of receiving applications and processing authorisation requests for the hydrogen core network. The platform is also being prepared for use in other fields. The federal government agreed to support the authorisation process by developing an artificial intelligence assisted support solution called SPARK (hereinafter referred to as "SPARK module").

For developing and managing the implementation and operating phase of the digital platform, the federal government, represented by BMDS, contracted PwC with signature date of 10 December 2025 (Evidence No. 5) to ensure – among other things – that authorisation requests for the hydrogen core network can be processed digitally and with support by artificial intelligence.

The development of this digital platform between the state of Hamburg and the federal government was carried out in nine work packages (Evidence No. 3) and was finalised with the "go-live" of the SPARK module and its integration into the digital platform on 15 January 2026 (Evidence No. 4). The City of Hamburg provided a description of the state of implementation of the digital platform on 25 November 2025 with all work packages having been implemented except for work package 8 (Evidence No. 3), which was eventually finalised on 15 January 2026 as shown in the project overview by PwC (Evidence No. 4).

A visual impression of the digital platform for processing authorisation requests for the hydrogen core network can be found in the user journey of March 2026 by the federal state of Hamburg, a presentation of different screenshots of the digital platform with additional explanations (Evidence No. 6), and the click path for the SPARK module of 19 May 2026 by the BMDS showing its functionalities in different screenshots (Evidence No. 8).

The authorities provided the link to the official websites for applicants to submit their requests for approval for the hydrogen core network (Evidence No. 9), which show that the digital platform is online and in use for processing such authorisation requests.

The SPARK module was developed and programmed as open source and more technical information on SPARK can be found under the following links:

- Evidence No. 10: General webpage to the open-source code of SPARK. This page demonstrates how the digital platform has been programmed.
- Evidence No. 11: Information on the technical architecture of SPARK. This webpage shows the functionality of the platform to support the processing of applications, including planning and approval processes.
- Evidence No. 12: Information on the system architecture of SPARK. This webpage shows how artificial intelligence supports completeness and plausibility checks, as well as for decision and justification drafting.

The Commission services accessed the links provided by the authorities under Evidence No. 9 to No. 12 on 10 July 2026 and again on 18 September 2026 to verify that the digital platform is online and operational (Evidence No. 9) and its source code with further system and technical information available (Evidence No. 10 to 12). This check was completed successfully, confirming that the digital platform is in use for processing authorisation requests for the hydrogen core network.

A list of the functionalities and features of the SPARK module, which also includes support by artificial intelligence, are described in the feature list of the open-source code of the SPARK workflow in German language (Evidence No. 13) and English language (Evidence No. 14).

These functionalities and features include for example:

- upload of application documents, content extraction
- formal completeness check against official requirements and provided table of contents
- plausibility check with contradiction detection within documents and between documents
- material completeness checks with reference to relevant legal norms and consideration of legal changes
- authority and public participation with management of participation submissions and sorting of arguments and topics
- legal review and assessment
- approval decision and justification drafting with artificial intelligence risk indicator for quality assurance

These functionalities like automated completeness and plausibility checks as well as drafting proposals for justifications and decisions are further described in the user manual of SPARK (Evidence No. 7), produced by the BMDS with date of 29 May 2026:

- Pages 45-50: Formal completeness and plausibility checks
- Pages 51-60: Material completeness checks
- Pages 61-69: Authority and public participation
- Pages 70-79: Legal review and decision drafting

Moreover, the Commission services conducted an on-the-spot check on 9 July 2026 to verify that the digital platform is operational and actually processes authorisation requests for the hydrogen core network with the help of automated support functions by looking into the actual programme of the digital platform and going through its different automated support functions for one real application case. This check was completed successfully, confirming – based on the example of one submitted application – that the digital platform is processing authorisation requests for the hydrogen core network and offers automated support functions.

Additionally, BMDS and BMI contracted the law firm KPMG Law on 10 March 2025 and 6 February 2026 to monitor the development and implementation of the digital platform (Evidence No. 17).

With letter dated 17 September 2026 KPMG Law states that in their capacity as reviewer and acceptor for the digital platform they confirm that with cut-off date of 26 August 2026 the digital platform was operational and functional (Evidence No. 16).

Furthermore, several characteristics of the digital platform allow for accelerating the planning and approval process of energy infrastructural projects for the hydrogen core network. These characteristics are mentioned and described in the cooperation agreement of Evidence No. 2, the user journey of Evidence No. 6, the SPARK workflow click path of Evidence No. 8 and the websites for sending in applications of evidence No. 9 and can be summarised as follows:

- End-to-end: The digital platform offers a fully digitalised process from the beginning (sending of application) to the end (sending of approval or rejection decision).
- Once-only principle: Data has to be provided only once throughout the whole process, and the platform recurs to already provided data so that multiple entries of the same data can be avoided.
- Support by artificial intelligence: The integrated support by artificial intelligence to analyse data automatically and check for completeness, plausibility and inconsistencies speeds up the assessment process and allows to focus on critical issues.

Finally, BMDS announced on 4 February 2026 that it had won an international prize for its innovative digital platform to speed up planning and approval processes (Evidence No. 15). This prize was awarded in Dubai at the “World Government Summit” in the category “Best Use of AI in Government Services”.

On this basis, the Commission has reasonable assurance that this milestone has been satisfactorily fulfilled by 31 August 2026.

4. Commission Preliminary Assessment: Satisfactorily fulfilled