

Federal Ministry Republic of Austria Climate Action, Environment, Energy, Mobility, Innovation and Technology





PPPI POLICY NOTE 2023

10 YEARS PUBLIC PROCUREMENT PROMOTING INNOVATION (PPPI) IN AUSTRIA: LOOKING BACKWARD AND FORWARD



Vienna, 2023

Imprint

Owner and publisher:

Federal Ministry of Labour and Economy (BMAW), Stubenring 1, 1010 Vienna Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK), Radetzkystraße 2, 1030 Vienna

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1 Summary

In Austria, public procurement promoting innovation (PPPI) has been an issue since 2007 and is now well established in the form of the PPPI initiative. A main milestone has been the adoption of the PPPI Action Plan 2012 (IÖB-Leitkonzept 2012) and its subsequent implementation until now. Highlights of the past decade concerning PPPI services, projects, and the related monitoring and benchmarking are described in the looking backward section. Insights into the ongoing process of updating the PPPI Action Plan 2012 in the form of the PPPI Strategic Framework 2030 are provided in the looking forward section.

2 Looking backward: Austrian PPPI achievements

Public procurement promoting innovation (PPPI) arrived in Austria in 2007 as a topic driven by the European Union. It became visible through the widely communicated Austrian procure_inno¹ guidelines. Although the guidelines received positive acceptance, they had no significant mobilization impact due to the lack of accompanying measures.

The situation changed significantly with the preparation and implementation of the PPPI Action Plan 2012 based on three prerequisites: First, the incorporation of demand-side stimulation for innovation in the catalogue of objectives within the Austrian RTI strategy 2011². Second, a government mandate to formulate a PPPI Action Plan in 2011 as well as a government mandate to implement it in 2012³. Third, a comprehensive PPPI strategy development process with more than 90 stakeholders participating who became key players in the PPPI Action Plan implementation⁴.

Austria can be proud of its achievements in PPPI in the past decade. This can be shown on the national level (section 2.1) as well as on the European level (section 2.2).

¹ BMWA (2007) procure_inno: Praxisorientierter Leitfaden für ein innovationsförderndes öffentliches Beschaffungs- und Vergabewesen [Guide on public procurement promoting innovation] Wien: Bundesministerium für Wirtschaft und Arbeit.

² BKA, BMF, BMUKK, BMVIT, BMWFJ & BMWF (2011) Strategy for research, technology, and innovation of the Austrian Federal Government. Vienna: Austrian Federal Chancellery.

³ BMWFJ & BMVIT (2011) Ministerratsvortrag: Entwicklung eines österreichischen Leitkonzeptes für eine innovationsfördernde öffentliche Beschaffung (IöB) [Government mandate to formulate an action plan on public procurement promoting innovation] Wien. | BMWFJ & BMVIT (2012) Ministerratsvortrag: Umsetzung des österreichischen Leitkonzeptes für eine innovationsfördernde öffentliche Beschaffung (IÖB) [Government mandate to implement the action plan on public procurement promoting innovation] Wien.

⁴ Buchinger E. (2012) PPPI Policy Notes: The Austrian innovation procurement strategy process 2011/12. Vienna: Austrian Institute of Technology.

2.1 Highlights on national level since 2012

Austria has developed a well-established and successful innovation procurement initiative. This includes an effective interplay of governance, support, project as well as monitoring measures. Each of these four dimensions of the Austrian PPPI initiative has its specific highlights.

Governance

Austrian PPPI governance is conducted by the Federal Ministry of Labour and Economy (BMAW) and the Federal Ministry for Climate Action, Environment, Energy, Mobility, Innovation and Technology (BMK). Specific governance highlights are the successful rollout of the "Austrian PPPI Action Plan 2012"⁵ in line with the "Austrian RTI-Strategy"⁶ and backed by the "Austrian Procurement Law"⁷.

Since 2019, the PPPI service center is being run on the innovative legal basis of a publicpublic cooperation between BMK, BMAW and the Federal Procurement Agency (Bundesbeschaffung GmbH – BBG).

The forthcoming governance highlight is the "Austrian PPPI Strategic Framework 2030", which is described in section 3.

Support

Austrian PPPI support is mainly⁸ provided by the PPPI service center. Its comprising service portfolio – which links between public procurers on the demand side and innovative

⁵ BMWFJ & BMVIT (2012) Leitkonzept für eine innovationsfördernde öffentliche Beschaffung (IÖB) in Österreich [Austrian Action Plan on public procurement promoting innovation PPPI] Wien:

Bundesministerium für Wirtschaft, Familie und Jugend & Bundesministerium für Verkehr, Innovation und Technologie.

⁶ Most recent: Bundesregierung (2020) FTI-Strategie 2030 - Strategie der Bundesregierung für Forschung, Technologie und Innovation [RTI-strategy 2030 – Strategy of the federal government for research, technology, and innovation] Wien: Bundesregierung der Republik Österreich.

⁷ BGBI (2018/65) Bundesvergabegesetz 2018 (geltende Fassung) [Austrian procurement law (current valid version)]. Wien: Bundesgesetzblatt für die Republik Österreich.

⁸ See for network partners <u>https://www.ioeb.at/netzwerk/</u>.

companies as solution providers on the supply side – implements the mission statement: *"We build bridges"* (see figure 1).

The services in this portfolio are ranging from awareness-raising, networking, and training to strategic consulting and funding schemes. For public procurers six services are offered – "Innovation Platform", "Networking & Events", "Strategic PPPI Consultancy", "Trainings", "Pilot Projects", and "Financial Support" – of which two – "Innovation Platform" and "Networking & Events" – are available for innovative companies too. As highlights, the "Innovation Platform" and two "Funding Schemes" are characterized:

- The online tool <u>www.ioeb-innovationsplattform.at</u> enables the conduct of "PPPI challenges" an innovative method for market discovery which reached a milestone with the 50th challenge in 2022 on the one hand, and highlights innovative, jury reviewed solutions of companies on the "marketplace innovation" on the other. Currently this tool is adopted with the consent of the Austria PPPI initiative in Portugal (based in the European <u>P2I project</u>).
- Within the funding scheme <u>"IÖB-Toolbox</u>" public procurers are provided with cofinancing and support in planning and conducting "PPPI challenges" (module "Prepare") and the subsequent purchasing (module "Transfer").
- The funding scheme <u>"F&E-Innovationspartnerschaft</u>" provides co-financing and support for public procurers as well as innovation partners during the tendering and the R&D phase of the legal instrument <u>"Innovation Partnership</u>".

Projects

Austrian good practice PPPI projects should serve as motivation for other public procurers and are therefore collected and presented online⁹. For illustration, two examples from the IÖB-Toolbox funding scheme are highlighted below.

- Development of a digital twin of a railway bridge in the city of Linz, enabling a costand time-saving approach for inspection or evidence documentation. A local start-up company was selected to provide this service.
- Provision of a comprehensive Internet of Things (IoT)-based environmental data monitoring system, procured by the municipalities of Zeltweg and Knittelfeld. The

⁹ See: <u>https://www.ioeb.at/erfolgreiche-projekte</u>.

system delivers an objective depiction of the current environmental situation, also serving as a foundation for public discussions.

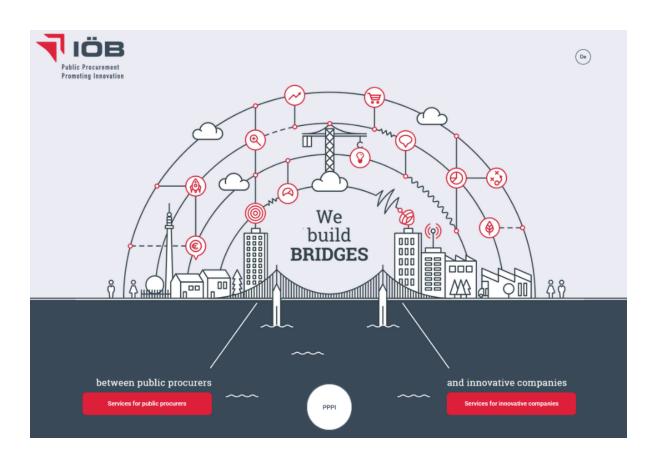


Figure 1: Mission of the Austrian PPPI service network | Source: <u>https://www.ioeb.at/en/</u>

Monitoring

Recurrent measurement and evaluation activities are a key element of the PPPI initiative. Several classical evaluations were carried out such as the evaluation of the implementation of the PPPI action plan in Austria¹⁰, the evaluation of the above-

¹⁰ Ruhland S., Kaufmann J., Ploder M. & Zinke G. (2018) Evaluierung der Umsetzung des Leitkonzepts für eine innovationsfördernde öffentliche Beschaffung in Österreich [Evaluation of the implementation of the PPPI action plan in Austria]. Wien: KMU Forschung Austria.

mentioned public-public cooperation between BMK, BMAW and BBG¹¹ as well as two evaluations focusing on the IÖB-Toolbox funding scheme^{12,13}.

Furthermore, the quantitative measurement conducted by Statistics Austria in 2013-2015^{14,15} focusing on financial volumes, as well as the succeeding qualitative impact research in 2018/2019¹⁶ focusing on the societal, user and competitiveness value added need to be highlighted in this context.

2.2 Highlights on European level since 2012

Austria has been engaged in various European innovation procurement activities to learn from other national initiatives as well as presenting and discussing Austrian experiences and achievements. Highlights are the participation in the "Mutual Learning Exercise (MLE) on Innovation-related Public Procurement"¹⁷, the piloting of an European innovation

¹¹ Brunner P., Demirol D., Dick N., Pistelka M., Pöchhacker-Tröscher G., Schneider H. W. & Wagner K. (2022) Evaluierung der Kooperation im Bereich der lÖB zwischen BMDW, BMK und BBG [Evaluation of the PPPIcooperation between BMDW, BMK and BBG]. Wien: Bundesministerium für Digitalisierung und Wirtschaftsstandort.

¹² Streicher J., Schütz M., Sauer A., Buchinger E. & Mehnert W. (2023). Evaluierung des Förderprogramms IÖB-Toolbox [Evaluation of the funding scheme IÖB-Toolbox]. Wien, Bundesministerium für Klimaschutz, Umwelt, Energie, Mobilität, Innovation und Technologie.

¹³ Streicher J., Breitfuss-Loidl M., Ploder M. & Buchinger E. (2021). Zwischenevaluierung des Förderprogramms lÖB-Toolbox [Interim-evaluation of the funding scheme lÖB-Toolbox]. Wien-Graz, Joanneum Research & Austrian Institute of Technology.

¹⁴ Bauer K., Gründler C., Haitzmann M., Schiefer A. & Zach S. (2015) Quantifizierung innovationsfördernder öffentlicher Beschaffung bei öffentlichen Unternehmen & im öffentlichen Sektor [Quantification of PPPI in the public sector]. Wien: Statistik Austria.

¹⁵ Buchinger E. & Schiefer A. (2017) Policy note: Monitoring & measurement of innovation procurement in Austria. Vienna: Austrian Institute of Technology.

¹⁶ Ploder M., Streicher J., Buchinger E. & Kienegger M. (2019) IÖB Wirkungsanalyse: Tiefergehende, wirkungsorientierte Analyse von innovationsfördernden öffentlichen Beschaffungsprojekten in unterschiedlichen Anwendungsfeldern [PPPI impact analysis]. Wien-Graz: Joanneum Research & Austrian Institute of Technology.

¹⁷ See <u>https://ec.europa.eu/research-and-innovation/en/statistics/policy-support-facility/mle-innovation-related-public-procurement</u> and Edquist C., Zabala-Iturriagagoitia J.M., Buchinger E. & Whyles G. (2018) Mutual learning exercise: MLE on innovation related procurement. Brussles: European Commission DG RTD | Horizon 2020 Policy Support Facility.

procurement broker scheme "InnoBrokers"^{18,19}, the participation in the <u>Procure2Innovate</u> project²⁰ and the related establishment of the <u>P2I network</u>, and the continuously ongoing multilateral exchange.

Austria also shows a good performance in international benchmarks^{21,22}. Recent benchmarking studies^{23,24,25} confirm Austria's leading position, while providing indications for further development.

Austria is a good performer in PPPI policy and should optimize further

The PwC benchmarking study commissioned by the European Commission on national policy frameworks for PPPI confirms Austria's excellent positioning, ranking second after Finland (figure 2). The policy framework is measured by 10 indicators that represent the country-specific mix of supportive policy measures. The indicators range from PPPI action plan to PPPI embedding in horizontal and sectoral policies and PPPI incentives to PPPI target and PPPI monitoring.

However, this good result is not yet a reason to sit back. Neither for Finland, nor for Austria, nor for the other "good performers". While Finland uses 67.6% of its potential of supporting political PPPI framework conditions (total score across the 10 indicators), Austria's score is only 52.3%. Where are Austria's strengths and weaknesses in this regard?

¹⁸ Buchinger E. & Kienegger M. (2020). Innovation procurement broker: Business model. InnoBroker Consortium.

¹⁹ Raagarad-Ernst C., Díaz-Martin L., McGrath M. & Pöcklhofer H. (2020) Catalouge of best practices on public procurement of innovative solutions (PPI). InnoBroker Consortium.

²⁰ See <u>https://procure2innovate.eu/austria/</u>.

²¹ ERAC (2015) ERAC opinion on innovation procurement. (Task Force Members: Laatsit M./rapporteur, Adolphe D., Beley B., Buchinger E., Ortiz Pajares M., Garrido M., Kalytis R., Pavlaković I., Rajalo S., Svendsen L., Vermeulen H., Vilén K., Voort L., Putten M.). Brussels: European Research Area and Innovation Committee.

²² OECD (2017) Public procurement for innovation: Good practices and strategies. Paris: Organisation for Economic Co-operation and Development.

²³ PWC (2021) The strategic use of public procurement for innovation in the digital economy. Brussels: European Commission DG CNECT.

²⁴ PWC (2020) Austria country profile: The strategic use of public procurement for innovation in the digital economy. Brussels: European Commission DG CNECT.

²⁵ EC (2020) Benchmarking of R&D procurement and innovation procurement investments in countries across Europe. Brussels: European Commission DG CNECT.

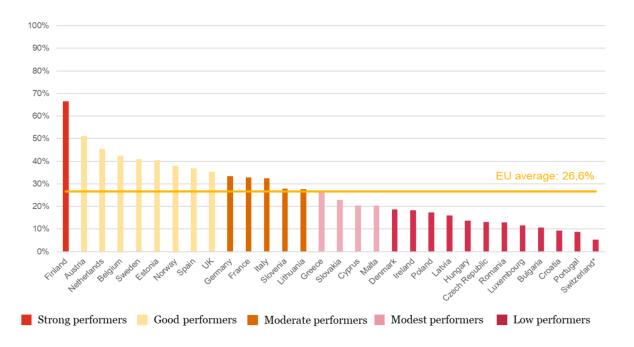


Figure 2: Ranking and clustering of countries based on policy frameworks | Source: PwC (2021: 24)

According to the benchmarking study, Austria's strengths lie in its well-formulated PPPI action plan and its interaction with the extensive PPPI capacity building (website, success stories, trainings, services, tools, coordination, networking, one-stop-shop). Furthermore, it is emphasized that Austria has a well-structured monitoring and incentive system. Finally, Austria has a good performance in embedding PPPI in sectoral policies.

Above all, there is according to the benchmarking study a need for optimization in Austria in achieving the goal of "increasing PPPI spending" and in coordinating capacity-building activities with the financial incentives set. Furthermore, the monitoring system should be refined (including regular surveys). Finally, a better embedding of PPPI in horizontal policies (R&D policy, competition policy, etc.) and a PPPI-IPR policy measure are suggested.

Austria is progressing in terms of PPPI realization and should continue its efforts

The PWC benchmarking study commissioned by the European Commission on PPPI spending in a European comparison, positions Austria among the good performers. However, the numbers on PPPI expenditure in the benchmarking study differ markedly from the numbers derived from an analysis conducted by Statistics Austria^{26,27}. While, according to Statistics Austria, a PPPI share of total procurement volume of 2.3% to 3.3% was determined for the government sector (reporting year 2013) basis on a survey (primary data), the benchmarking study indicates a PPPI share of total procurement volume of 10.0% (reporting year 2018) ^{28,29}.

Of course, these numbers cannot be compared directly with each other, as both the reporting year and the survey method differ. Since also for Norway the numbers of the benchmarking study differ from national analysis³⁰, some concerns about the precision of the method and/or the data exist which should be considered in the ongoing renewal of the benchmarking³¹. Within the existing benchmarking study Austria is above the European average of 9,3% PPPI share of total procurement volume.

However, Austrian efforts to increase the number of PPPI projects, of which a significant proportion are of large volume (high contract value) should be continued. This corresponds with Austria's goals for the next decade outlined in the *"* PPPI Strategic Framework 2030".

 ²⁶ Bauer K., Gründler C., Haitzmann M., Schiefer A. & Zach S. (2015) Quantifizierung innovationsfördernder öffentlicher Beschaffung bei öffentlichen Unternehmen & im öffentlichen Sektor. Wien: Statistik Austria.
²⁷ Buchinger E. & Schiefer A. (2017) Policy note: Monitoring & measurement of innovation procurement in Austria. Vienna: Austrian Institue of Technology.

²⁸ Bauer et al. (2015).

²⁹ Buchinger E. & Schiefer A. (2017) Policy note: Monitoring & measurement of innovation procurement in Austria. Vienna: Austrian Institute of Technology.

³⁰ Oslo Economics (2021) Remarks on the European Commission's benchmark of PPI investments in European countries. Oslo.

³¹ See Workshop March 23, 2023 <u>https://digital-strategy.ec.europa.eu/en/library/first-workshop-european-innovation-procurement-observatory</u>.

3 Looking forward: PPPI Strategic Framework 2030

The Austrian PPPI Action Plan 2012 is currently updated in the form of the PPPI Strategic Framework 2030. The process started in 2020 and will be finalized end of 2023. In this chapter first the strategic embedding of innovation procurement will be discussed, followed by a short outline of the participatory process of the development of the PPPI Strategic Framework 2030 and finalized by the – as of today – 10 fields of PPPI action identified and validated in the process so far.

3.1 Strategic embedding of innovation procurement: Twin transition and beyond

Importantly, the PPPI Strategic Framework 2030 links with strategic planning on the European level that aim at sustainable economic growth and the promotion of environmentally friendly technologies. Accelerating the digital and green transition is a priority, in line with the new growth strategy, the European Green Deal³², which is pictured as being key in fostering lasting and prosperous growth³³. This "twin transition" recognizes that the challenges posed by climate change and the opportunities presented by digital technologies such as artificial intelligence, automation, and data-driven innovations are intertwined and require coordinated efforts to achieve sustainable and inclusive development. Fostering the relationship between Circular Economy and Industry 4.0 has also been recognized as a crucial pathway for achieving long-term environmental sustainability and addressing global challenges. The New European Innovation Agenda³⁴ aims to position Europe at the forefront of the twin transition by actively promoting the

³² EC (2019), The European Green Deal, COM(2019)640. European Commission: Brussels.

³³ Ortega-Gras J.-J., Bueno-Delgado M.-V., Cañavate-Cruzado G., Garrido-Lova J. (2021) Twin Transition through the Implementation of Industry 4.0 Technologies: Desk-Research Analysis and Practical Use Cases in Europe. Sustainability 2021, 13, 13601.

³⁴ EC (2022), A New European Innovation Agenda, SWD(2022) 187 final. Brussels: European Commission.

development of new (digital) technologies to address the most pressing societal challenges, and to bring them on the market.

The Green New Deal itself is part of the European Commissions' strategy to implement the UN's 2030 Agenda; in line with the sustainable development goals (SDGs). Digital transformation is regarded as a key enabler for reaching the Green Deal objectives. This notion is further reinforced in the New Industrial Strategy for Europe, emphasizing the need to introduce new ways of thinking and working, leading to both transitions, green and digital³⁵. Within the main European funding programme "Horizon Europe" for R&I, there is a set of calls specifically focusing on accelerating the twin transition in specific industry sectors and technologies.

"Europe's ability to lead the twin transitions will require new technologies, with investment and innovation to match. Research and innovation will be fundamental to create the new products, services and business models needed to sustain or enable EU industrial leadership and competitiveness, and to create new markets for climate neutral and circular products. The shift towards a sustainable and inclusive economic model will be further enabled by a broader diffusion and uptake of digital and clean technologies across key sectors"³⁶.

Public procurement that promotes innovation can make a significant contribution to environmental sustainability and decarbonization, and to accelerate progress towards the SDGs. While only one of the SDGs references public procurement (target 12.7 under SDG 12)³⁷, public spending is important to achieving most of the goals. Examples include SDG 8 (Decent Work and Economic Growth), SDG 9 (Industry, Innovation, and Infrastructure) and SDG 13 (Climate Action). Adapting relevant laws and standards, setting specific goals, and increasing the professionalization of PPPI can support goal awareness and achievement.

³⁵ EC (2020) Communication from the Commission to the European Parliament, the European Council, the Council, the European Economic and Social Committee and the Committee of the Regions—A New Industrial Strategy for Europe; COM(2020)102 final. European Commission: Brussels.

³⁶ Horizon Europe (15 December 2021), Work Programme 2021-2022, 7. Digital, Industry and Space, EC Decision C(2021)9128, Available online:

https://ec.europa.eu/info/fundingtenders/opportunities/docs/2021-2027/horizon/wp-call/2021-2022/wp-7-digital-industry-and-space horizon-2021-2022 en.pdf.

³⁷ <u>https://sustainabledevelopment.un.org/sdg12</u>; Target 12.7 states the need to "promote public procurement practices that are sustainable, in accordance with national policies and priorities".

The renewed Austrian Research, Technology and Innovation (RTI) Strategy 2030 recognizes public procurement as an innovation fostering tool, aiming at increasing the impact of climate- and environmentally relevant technologies through PPPI in the coming years. This approach is reflected in the most recent RTI Pact 2024–2026, which operationalises the goals and fields of action of the RTI Strategy as well as in other national topic-related strategies, such as Austria's 2030 Mobility Master Plan or the Circular Economy Strategy. In light of this, the Austrian PPPI Strategic Framework 2030 provides strategic objectives, measures, and tools to support public institutions with their procurement practices for innovative, sustainable solutions.

3.2 Participatory process of the development of the PPPI Strategic Framework 2030

Given the many different agencies and stakeholders involved in public procurement in Austria, co-ordination in the participatory process of the development of the PPPI Strategic Framework 2030 has been essential. The process brought together the responsible federal ministries and representatives of the PPPI service network³⁸ as well as stakeholders from various institutions and agencies such as PPPI specialized consultants and e-procurement platform operators.

Figure 3 shows the steps of the PPPI Strategic Framework 2030 development process. Starting in 2020, a series of focus groups and interviews have been conducted to gather ideas about the learnings of the past decade, the goals for the next decade and related measures. On that basis, 10 action fields have been identified, discussed and enriched by the PPPI community by conducting an online survey. The invitation to participate in the online survey was distributed via the Austrian PPPI newsletter (and thus covering the entire Austrian PPPI community). 50 Stakeholders from economy, politics and the intermediary sector responded. This rich material has been used to formulate a first draft of the PPPI Strategic Framework 2030 which has been validated by the responsible ministries. The formulation of a second draft and a related validation are in progress.

³⁸ See: <u>https://www.ioeb.at/netzwerk</u>.

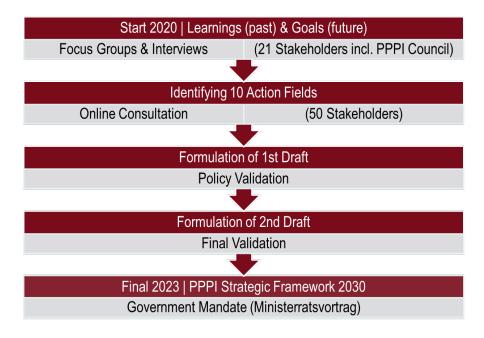


Figure 3: Process of the development of the PPPI Strategic Framework 2030

3.3 Fields of action and outlook

As described above, ten – as of today – fields of action have been elaborated which are listed below. They will build the backbone of the PPPI Strategic Framework 2030 and are clustered with reference to or rather address a strategic, operative, legal, and monitoring dimension.

Strategic dimension

- Renewing political PPPI commitment and strengthening strategic anchoring
- Mitigating risks and creating incentives for PPPI through additional expenses
- Contributing to the solution of societal challenges
- Using exchange and benchmarking in an international context

Operative dimension

- Expanding the PPPI service network
- Better present and communicate positive effects of PPPI
- Intensifying the qualification of PPPI practitioners
- Developing (further) SME tailored incentives

Legal dimension

• Using public procurement law as a framework for innovation procurement

Monitoring dimension

• Improving PPPI monitoring and the PPPI data base

These fields of action have been the basis for the formulation of the first draft of the PPPI Strategic Framework 2030 and are servings as the basis for the discussion and the formulation of the second draft which is currently in progress.

Eventually, the implementation of the final version of the PPPI Strategic Framework 2030 should be mandated by the Austrian Government (Minsterratsvortrag).

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