

# Knowledge Transfer Project on Public Support to Smart Grid RD&I

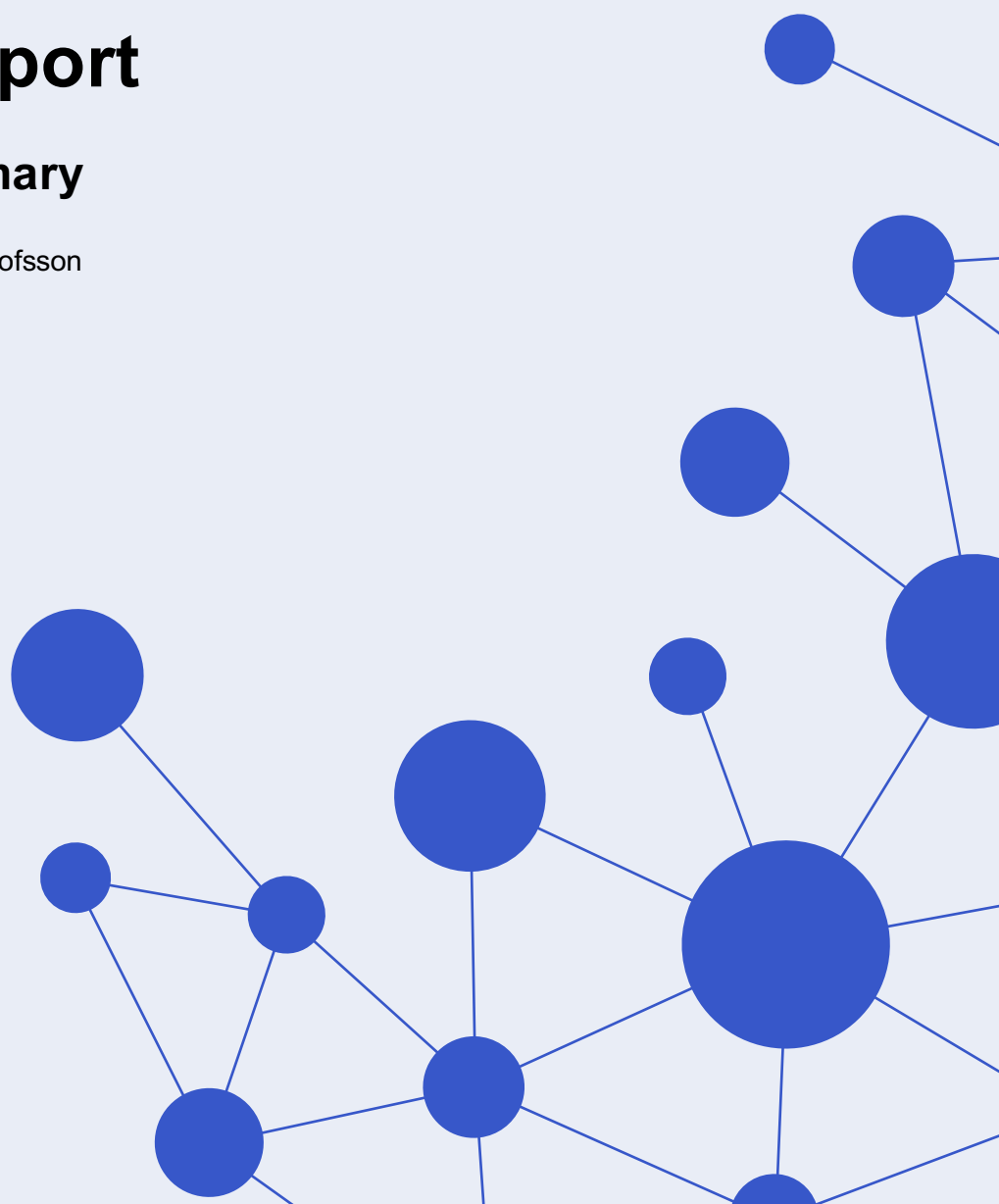
## Focus: Key Performance Indicators

# Project Report

## Executive Summary

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# 1. Introduction

The general, long-term objective of the *Knowledge Transfer Project (KTP) on Public Support to Smart Grid RD&I* project is to yield better results from publicly supported projects, by facilitating concrete and practical peer-to-peer guidance between public stakeholders regarding the design and implementation of funding programmes and similar support structures at national or regional level.

The purpose of this report is to give an account of a collaborative International Smart Grid Action Network (ISGAN) project on public support and funding to Smart Grid Research, Demonstration and Innovation (RD&I), with focus on the use of Key Performance Indicators (KPIs).

## 2. Background

In 2016, members of ISGAN Annex 2 took the initiative to start a knowledge transfer project (KTP)<sup>1</sup> focused on strategies and practices in regard to public funding and support to smart grid research, innovation and demonstration. The project concluded with an interactive KTP workshop in Genk, Belgium in September 2017, in conjunction with the 14<sup>th</sup> ISGAN Executive Committee meeting, resulting in important insights on a several themes with relevance to public funding and innovation support. That project marked the start of a community of practice with peers in different ISGAN countries exchanging experiences and lessons learned in this field.

The core group of participating countries from that first project were interested in continuing the international knowledge sharing and thus, a follow-up KTP project was designed and accomplished in 2018. This report describes the project and gives a summary of conclusions from the interactive knowledge exchange workshop held in Vienna 19-20 October 2018 in connection to 16<sup>th</sup> ISGAN Executive Committee meeting, hosted by the Austrian Federal Ministry for Transport, Innovation and Technology.

### 2.1. Focus topic

Based on the results of the 2017 project, the participating countries chose to focus the 2018 KTP project on the effective use of Key Performance Indicators (KPIs) to achieve quality in the design, delivery and evaluation of public funding programmes for smart grid research, development and innovation programmes.

### 2.2. Project and workshop participants

Participating countries in the project, (i.e. involved in all steps of the project process) were Austria, Denmark, Germany, India, Italy, Japan, Netherlands and Sweden. In addition, representatives from the following countries participated in the interactive workshop that was held at the Austrian Ministry of Transport, Innovation and Technology (BMVIT) offices in

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<sup>1</sup> Please visit the ISGAN Knowledge Transfer Project website for more information: <http://www.iea-isan.org/knowledge-transfer-project/>.

Vienna, Austria on 19-20 October 2018 in conjunction with the 16<sup>th</sup> ISGAN Executive Committee meeting: Canada, Morocco and South Korea.



Figure 1: Interactive dialogue at KTP workshop.

### 2.3. Project process

- Based on the results of the first KTP on Public Support to Smart Grid RD&I, participating countries were asked to choose the focus theme for the 2018 project. From a list of six possible themes, they chose to concentrate the project on Key Performance Indicators.
- To create the right conditions for a fact-based and informed knowledge exchange between participating countries, a detailed questionnaire was set up. This was based on concrete content suggestions from project participants.
- The questionnaire responses from 8 countries were compiled into a *Pre-Workshop Report*, for all project participants to read ahead of meeting their peers in the preparatory webinar and the KTP workshop.
- To prepare for an effective KTP workshop, the country representatives were asked to prepare a summary presentation (the country context, important smart grid programmes and key info in regard to the use of KPIs) in a preparatory webinar held on 8 September 2018.
- The purpose of the preparation work described above was to engage the participants and to create a common, structured and fact-based framework for the interactive dialogue to take place in the KTP workshop in Vienna.
- The workshop was structured to support participants in identifying, sharing knowledge and learning from each other's experience of using KPIs in smart grid public funding programmes. The workshop results were summarized in a list of key messages to organizations in ISGAN countries involved in public funding (see 3.1).
- After the workshop two reports were produced, one internal version for project participants only including all details from the project, and an executive summary for public use (this report).
- Representatives from each country are now tasked with spreading the learning from the international knowledge exchange in their respective organizations with a view to

maximize impact of future funding programmes and similar initiatives at national and regional level.



Figure 2: Discussion and clustering of challenges.

## 3. Results

### 3.1. Key messages

During the interactive KTP workshop in Vienna 18-19 October, the group of participants from 11 countries concluded on the following key messages in regard to Key Performance Indicators and their importance and use in public funding of smart grid Research Development & Innovation (RD&I).

Theme	Message
Usability	<ul style="list-style-type: none"><li>• KPIs are important tools for steering, monitoring and evaluation of results and impact from smart grid RD&amp;I.</li><li>• KPIs measure the intended benefits of RD&amp;I, which can be communicated to tax payers.</li></ul>
Benefits	<ul style="list-style-type: none"><li>• KPIs help policy makers to understand and prioritize among competing smart grid RD&amp;I initiatives.</li><li>• KPIs are an important monitoring tool indicating the performance and progress of RD&amp;I actions.</li><li>• KPIs can help make outcomes and impact more visible, comparable and assessable.</li></ul>
Risks	<ul style="list-style-type: none"><li>• KPIs may steer funding recipients in the wrong direction if measurability takes precedence over achieving the aim of the policy objective, e.g. when the number of published papers is used as KPI.</li></ul>

	<p>This does not guarantee that relevant or high-quality results are created by funded projects.</p> <ul style="list-style-type: none"> <li>• KPIs is not the only tool for assessment since unforeseen benefits may fall outside the initial scope and mission of the RD&amp;I action.</li> </ul>
<b>Recommendations when using KPIs</b>	<ul style="list-style-type: none"> <li>• Use of quantitative KPIs, that should be SMART<sup>2</sup>, may be complemented with qualitative indicators to accurately measure impact of results.</li> <li>• Consider and specify at which levels (policy, program, project etc.) the KPIs are to be used and how they affect each other across different levels.</li> <li>• The research community should be involved in the process of creating KPIs.</li> <li>• One should be careful in using input indicators (money spent, gender diversity, time demand, etc.).</li> <li>• Consider KPIs in an international, national and end-user context.</li> <li>• KPIs should evolve over time and be part of a continuous learning process.</li> </ul>



**Figure 3: Group photo of KTP workshop (not all 18 participants were present).**

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<sup>2</sup> SMART: Specific, Measurable, Actionable, Relevant, Time-bound



### 3.2. Additional results

In addition to the concrete message included above, the KTP project has also resulted in a more intangible but yet highly valuable outcome, namely that of further establishing a community of practice and a close network of peers in different ISGAN countries, through which knowledge and experience in regard to public funding of smart grid RD&I can be shared.

Workshop participants expressed interest in further collaboration and a number of ideas were generated, including for example to pool concrete KPIs from different countries or to apply best practice KPIs on an international funding programme. To promote and enable further dialogue on these matters a LinkedIn group was formed after the workshop.

## 4. Contact information

For more information regarding how ISGAN supports peer-to-peer sharing and learning in the field of smart grids, please visit the ISGAN Knowledge Transfer Project website:

<http://www.iea-isgan.org/knowledge-transfer-project/>.

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