

ERIC Forum Case study: ESS and socio-economic impact

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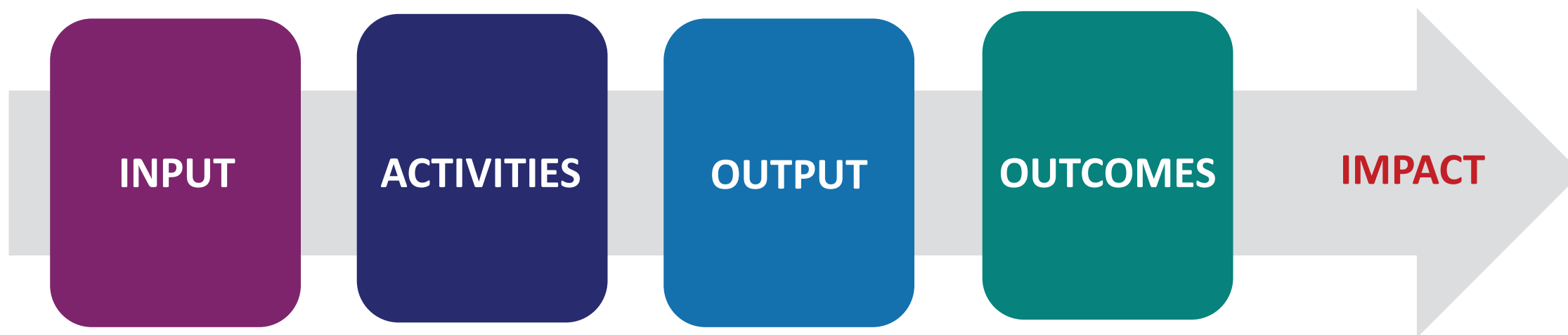
ESS VISION is to build and operate the world's most powerful neutron source, **enabling scientific breakthroughs** in research related to materials, energy, health and the environment, and **addressing some of the most important societal challenges** of our time.

One of our MISSION GOALS: We commit to deliver ESS as a facility that produces research outputs that are best-in-class both in terms of scientific quality and in terms of **socio-economic impact**

Socio-economic impact model

planned work

intended (and unintended) results



Funding, staff,
equipment,
knowledge, IKC,
other resources

Scientific,
technological,
educational,
industrial activities,
collaborations,
outreach etc.

Publications,
research data sets,
knowledge transfer,
skills, policies etc.

Uptake of outputs,
applications, change
of performance,
influence etc.

**Economic growth,
innovation, job
creation, social
capital etc.**

Our impact objectives

1

World-class research infrastructure enabling scientific breakthroughs and addressing grand societal challenges

2

Research infrastructure that supports and develops its user community, fosters a scientific culture of excellence and acts as an international scientific hub

3

Research Infrastructure that is built on time and on budget, operates safely, efficiently and economically, and responds to the needs of stakeholders

4

Research Infrastructure that develops innovative ways of working, new technologies, and upgrades to capabilities needed to remain at cutting edge

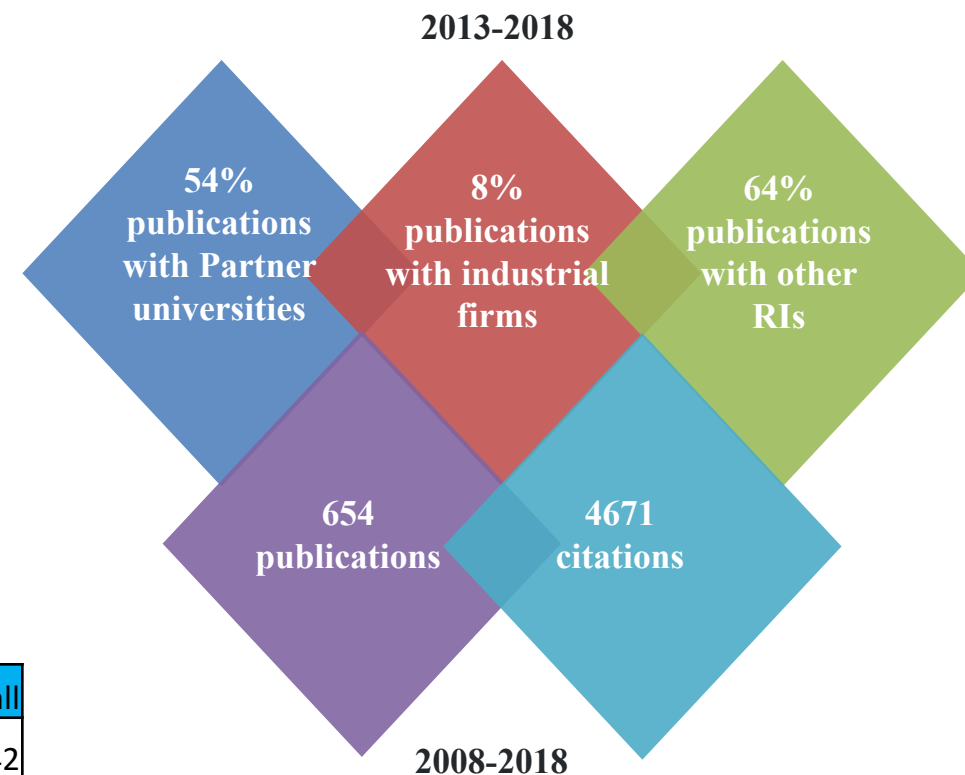
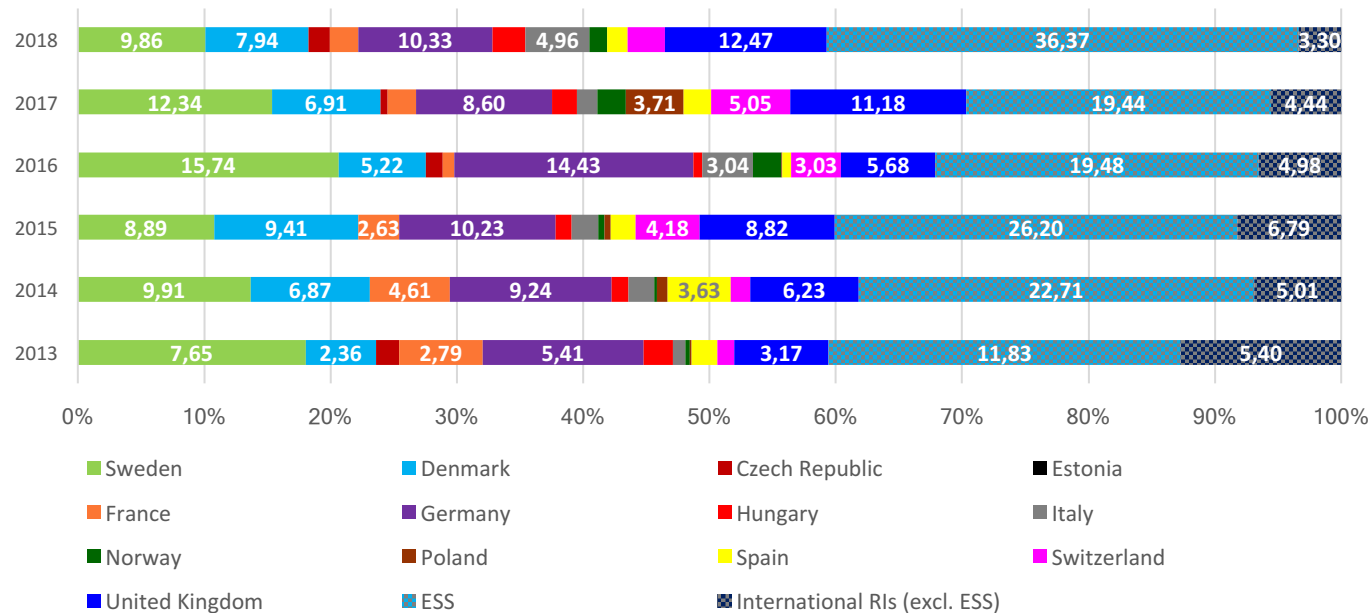
Lifecycle of a research infrastructure



**42 preliminary SEI
metrics and indicators**

**41 preliminary
SEI metrics and indicators**

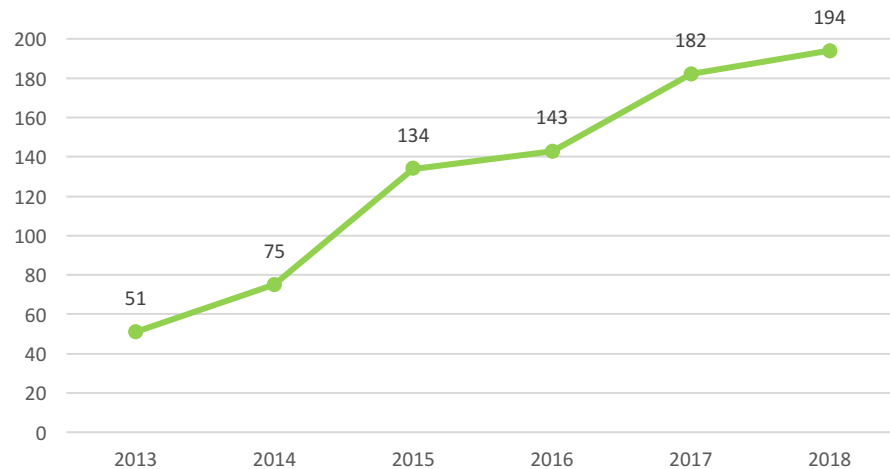
ESS co-publications by Member Country per year



	2013	2014	2015	2016	2017	2018	Overall
Total publ.	54	86	97	95	98	112	542
With MC	42	72	82	76	80	87	439
%	78%	84%	85%	80%	82%	78%	81%



Accumulated number of new partners involved in grant projects



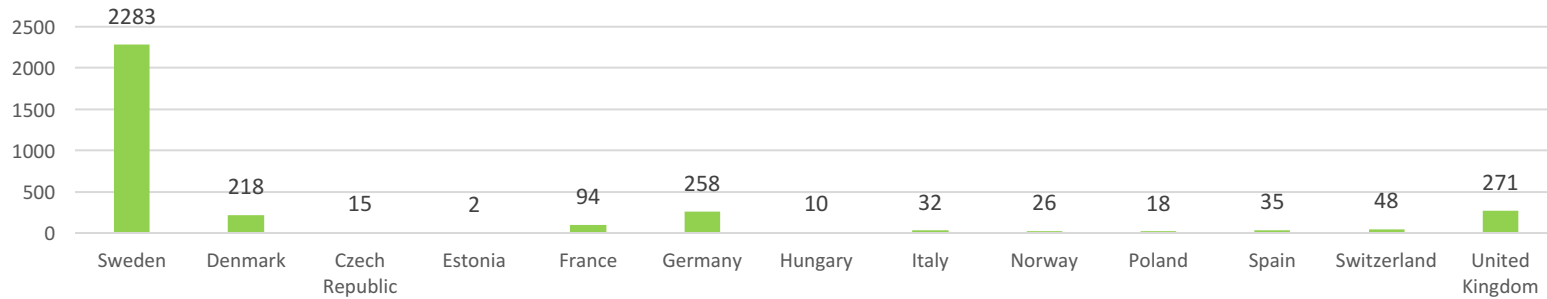
12 grant partners
from outside EU

Grant projects
involving industry from
SE, DK, DE, NO

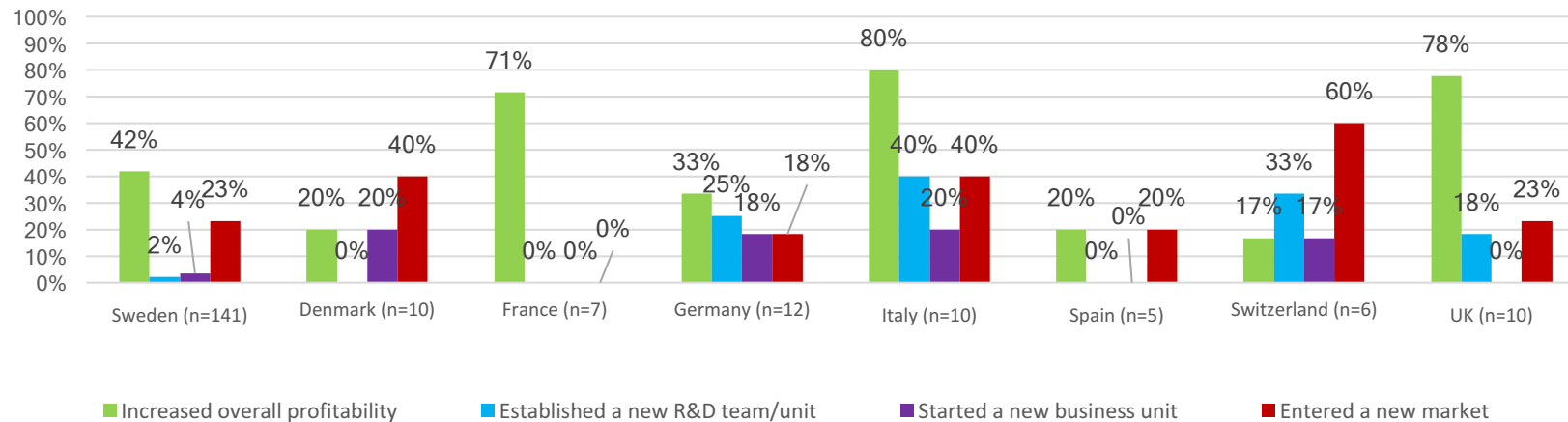
R&D projects with
industry
from **11** Member
Countries
(missing EE and HU)

IKPs reporting
having expanded
their network
due to their
relationship with ESS

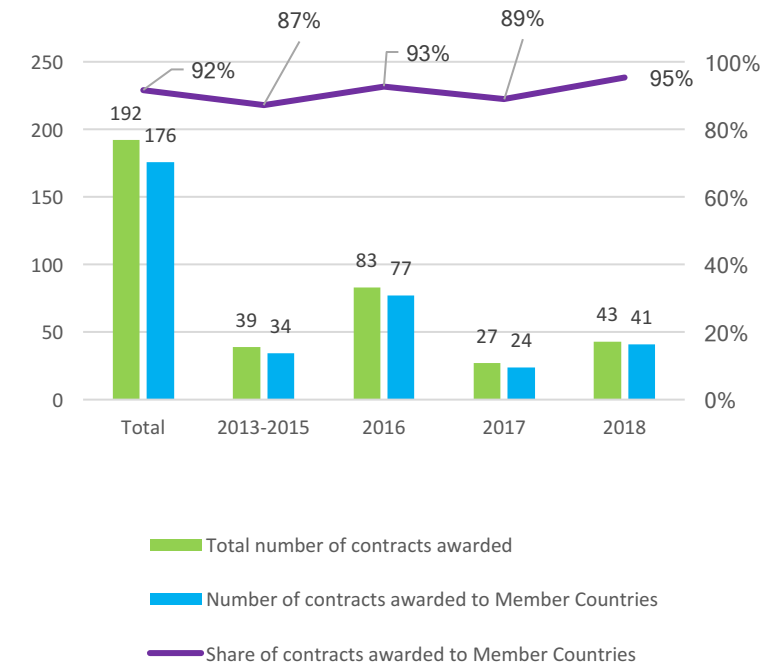
Total number of new suppliers per Member Country



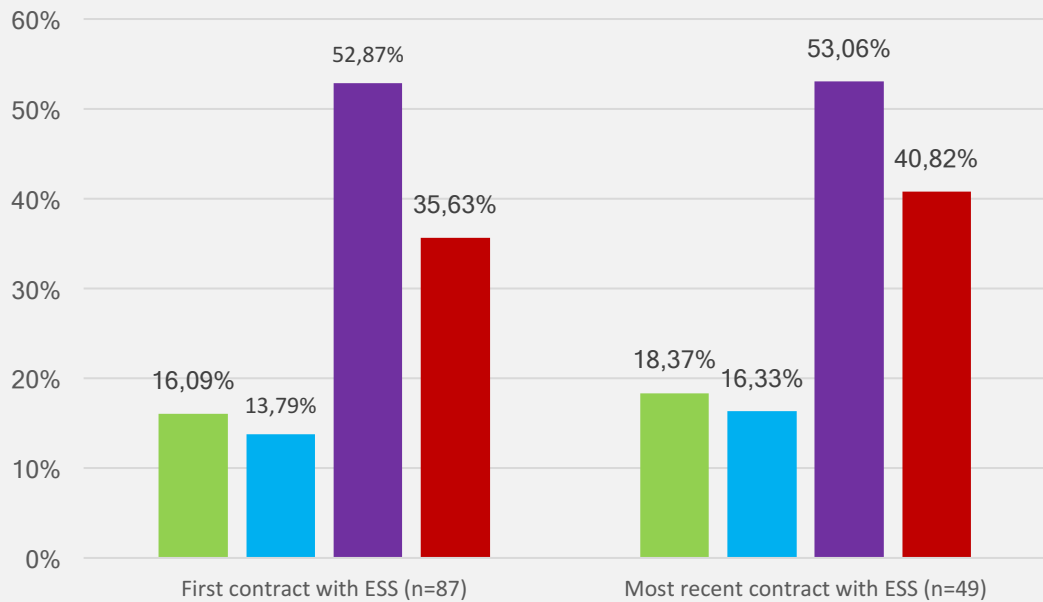
Economic benefit derived from supplying to ESS by responding Member Countries (results from ESS Supplier Survey)



Share of contracts awarded to Member Countries

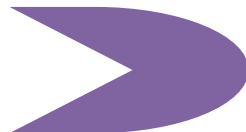
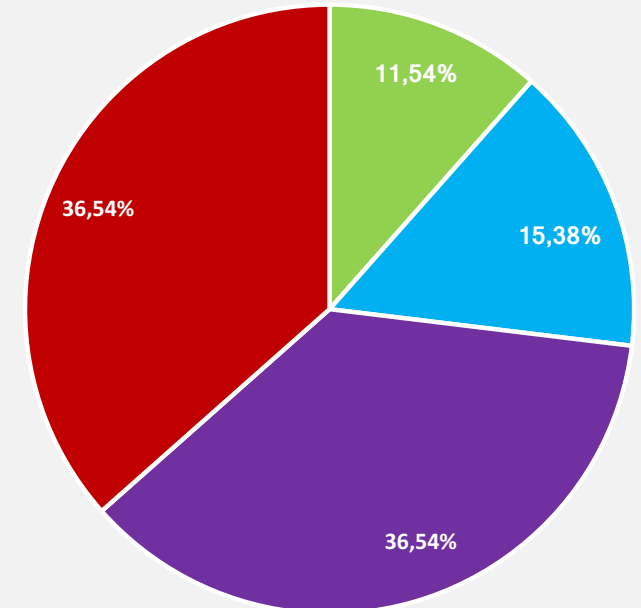


Innovation level of products and services supplied to ESS

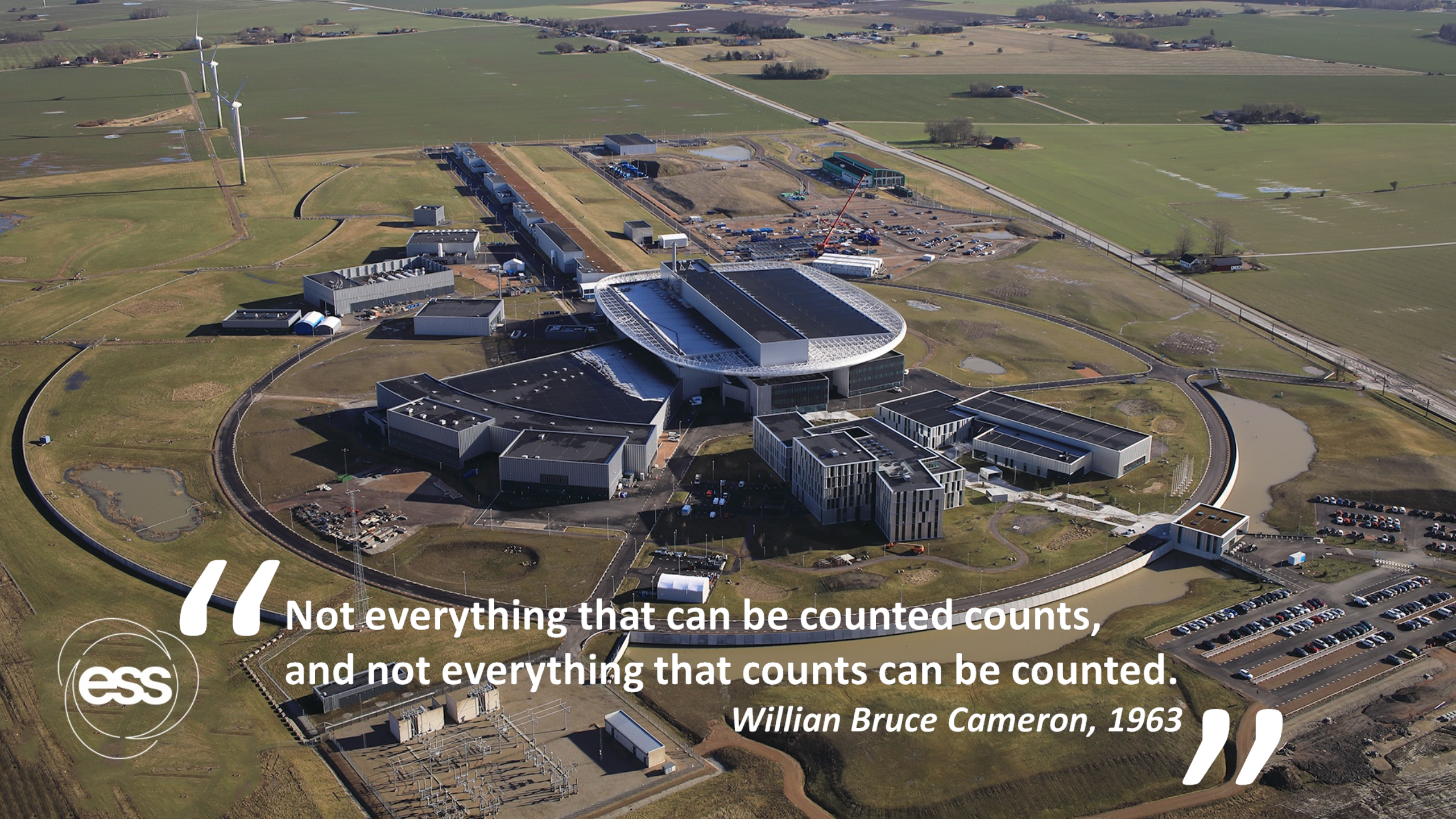


- Off-the-shelf products, technologies and/or services
- Minimal changes to off-the-shelf products, technologies and/or services
- Highly customized, technologies and/or services
- New and advanced products, technologies and/or services

Innovation level of In-Kind Contributions



- SEI is applicable from the concept phase through the complete lifecycle of a RI
- SEI/KPI parameters cannot be static and need to be tuned:
 - When phase milestones are achieved
 - If context or surrounding parameters have changed
 - Minimum on an annual basis
- SEI can be seen as a continuous project for a RI with reporting dates e.g. on an annual basis
- SEI does not have the same shape and form for all RI stakeholders:
 - ESS created narratives for each member country
 - A translation of SEI along the lines “what does it mean for you”
 - SEI can be seen as an abstract and agile currency depending on the “customer”
- A joint methodology, philosophy and toolset would help all RIs!



“ Not everything that can be counted counts,
and not everything that counts can be counted.

Willian Bruce Cameron, 1963 ”

