



GeSI

GLOBAL e-SUSTAINABILITY
INITIATIVE

Sustainability Assessment Standard Framework (SASF) for ICT Products and Services

Stakeholder Dialogue

Brussels, 25 September 2015

Agenda

10:00 am WELCOME REMARKS

10:15 am TOUR DE TABLE

10:30 am PRESENTATION OF THE SASF DEVELOPMENT AND FRAMEWORK

11:00 am TABLE SUMMITS: DISCUSSING CRITERIA, SUB-CRITERIA AND INDICATORS

12:30 pm LUNCH

01:30 pm TABLE SUMMITS: DISCUSSING THE WEIGHTING SYSTEM

03:00 pm REFLECTION: LESSONS LEARNED FROM THE TABLE SUMMITS

03:15 pm PANEL DISCUSSION: STEPS TOWARDS A SUSTAINABLE ICT SUPPLY CHAIN

03:45 pm CLOSING REMARKS

04:00 pm INFORMAL RECEPTION

Andreas Harker

A GLOBAL INDUSTRY STANDARD FOR SUSTAINABLE ICT PRODUCTS AND SERVICES.

Global e-Sustainability Initiative

Created in 2001, GeSI is a strategic partnership bringing together companies active in the ICT sector and international organisations committed to creating and promoting technologies and practices that foster economic, environmental and social sustainability, while driving economic growth and productivity.

The Need for a Comprehensive Assessment

Empirical findings suggest that **environmental impact of global ICT will increase** over the next few years under Business-As-Usual scenarios.

—

Increasing concern shown by consumers, civil society actors, policy-makers and shareholders on **sustainability issues related to global ICT.**

—

Proliferation of standards & benchmarks leading to **confusion & insecurity among consumers, policy-makers and civil society actors.**

—

Recent **initiatives** have started to **address the need for standardization of sustainability impact assessment methodologies** (e.g. European Commission's initiative on Product Environmental Footprint).

General Objective

Our Objectives

1. The overarching objective of this project is to develop a comprehensive sustainability assessment framework for products and services for the global ICT industry.
2. The framework aims to be gradually improved towards a sector-wide standard.



Objectives & Requirements



Comprehensiveness

- Environment
- Human rights
- Utility
- Indirect benefits



Practicality

- Use and referencing of existing standards and tools
- Focus on most important aspects



Modularity/flexibility

- Applicable to diverse ICT product: current and future and their variants
- Applicable in very different companies in different ICT sub-sectors



Relevance

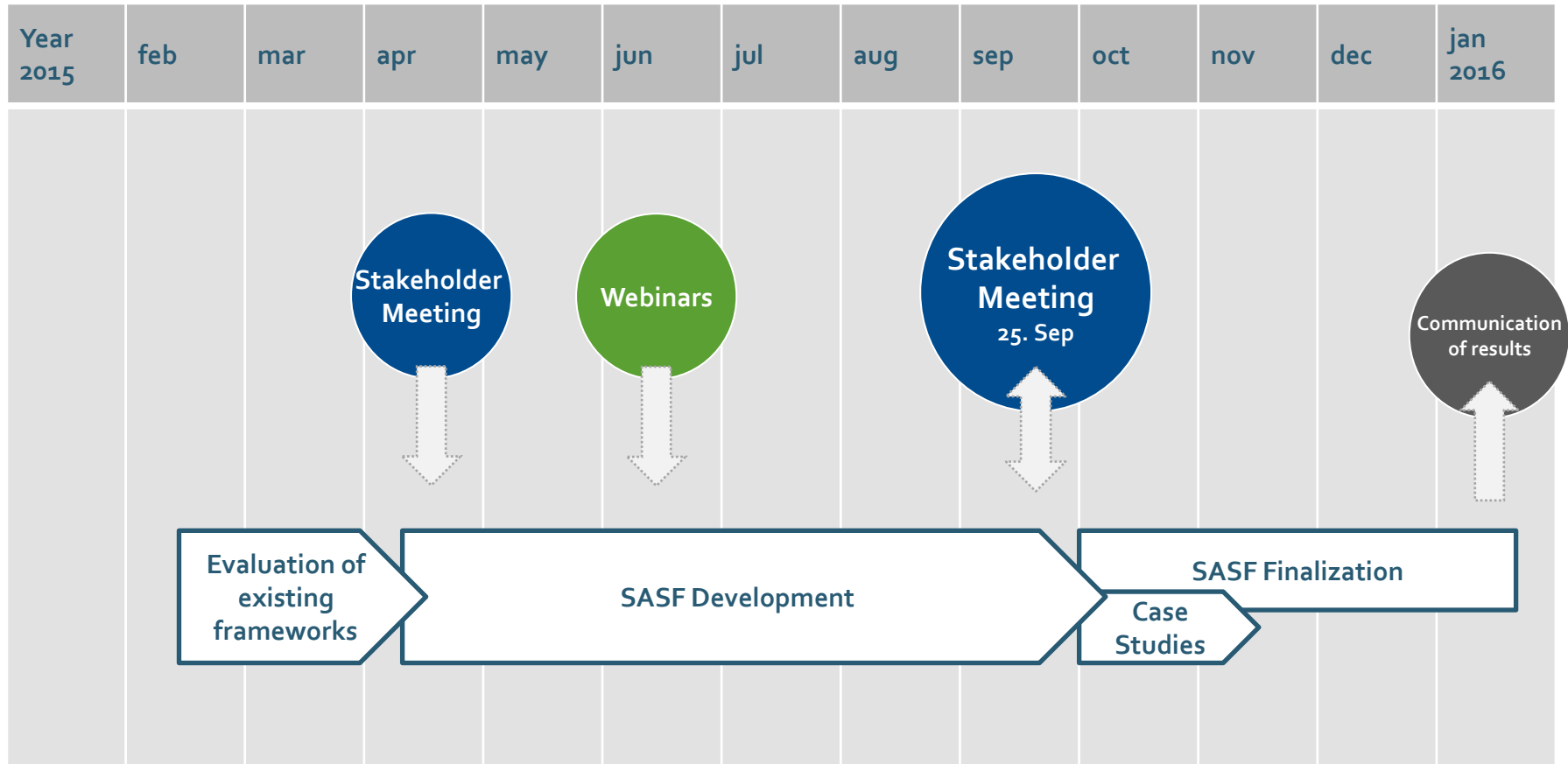
- Focus on most important criteria and indicators
- Weighting between criteria and indicators possible and substantiated



Acceptance/credibility

- Transparency in criteria, criteria development and assessments

Overview of Project's Steps



Participating Pilot Companies



Operating Partners



(Scientific Process)



(Engagement Process)



Participating Pilot Companies 2015



Thomas Henschel

TOUR DE TABLE.

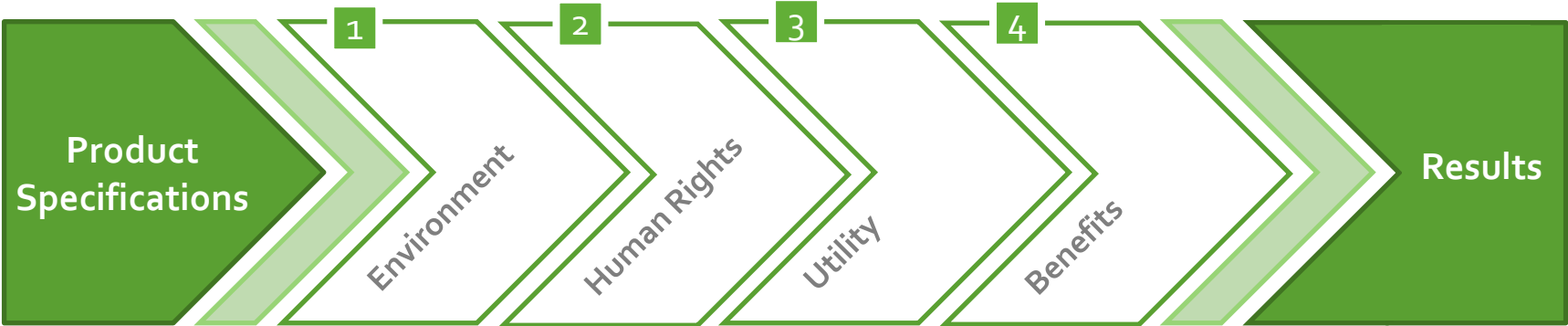
Siddharth Prakash

PRESENTATION OF THE SASF DEVELOPMENT AND FRAMEWORK.

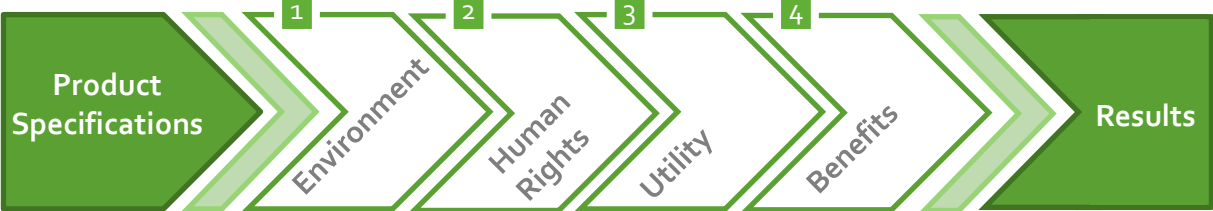
Focus of current project

Application	Included	Communication	Condition
Continuous product sustainability improvements	✓	Internal	
Comparison of similar products	✓	Internal	Based on internal available information
Assessment of new/future products	✓	Internal	Feasibility needs to be tested
Portfolio management, policy/decision making	✓	Internal	Comparability of different products limited
Establishment of sustainable product portfolio	✓	Internal	Requires establishment of minimum performance requirements
B2B communication (reporting)	✓	External	On the basis of comprehensive information

General Structure



General Structure



Product/System Filter

3	Market name of the product/ system*	MagentaEINS L	
4	Select type of product/ system	Triple-Play	
5	Components of the product/ system (default)	Select	Default Weighting based on selected product/ system type
6		Data Centre	50%
7		Network	25%
8		Hardware	25%
9	Does the product/ system provide specific indirect benefits to the society?	Yes/ No	

Selection of product/service components

Balance needed between assessment of each specific product type and practicality, while remaining flexible with regard to new/future product types

Specific indicators for each type of product



Very complex, inflexible and difficult to compare

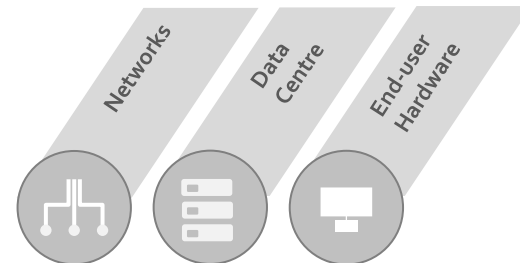
Same indicators for all products



Very general and arbitrary, though much less complex

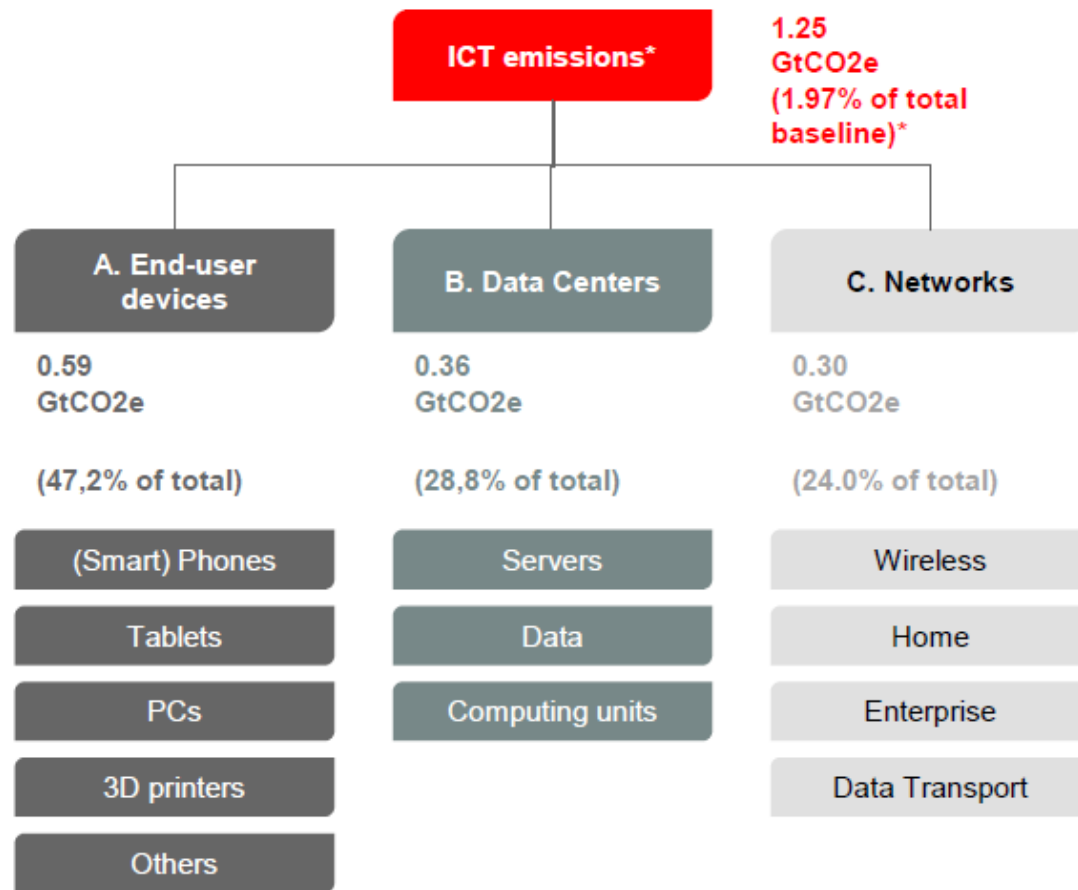


- Focus on **three important pillars of ICT** allows for the definition of more specific indicators while being applicable to majority of ICT products
- All three currently identified components have repeatedly been identified as important in terms of energy consumption/GHG emissions but also other sustainability impacts



Components of ICT products/services

SMARTER2030 study



Components of ICT products/services

Öko-Institut e.V. (2015): Smart 2012/0064

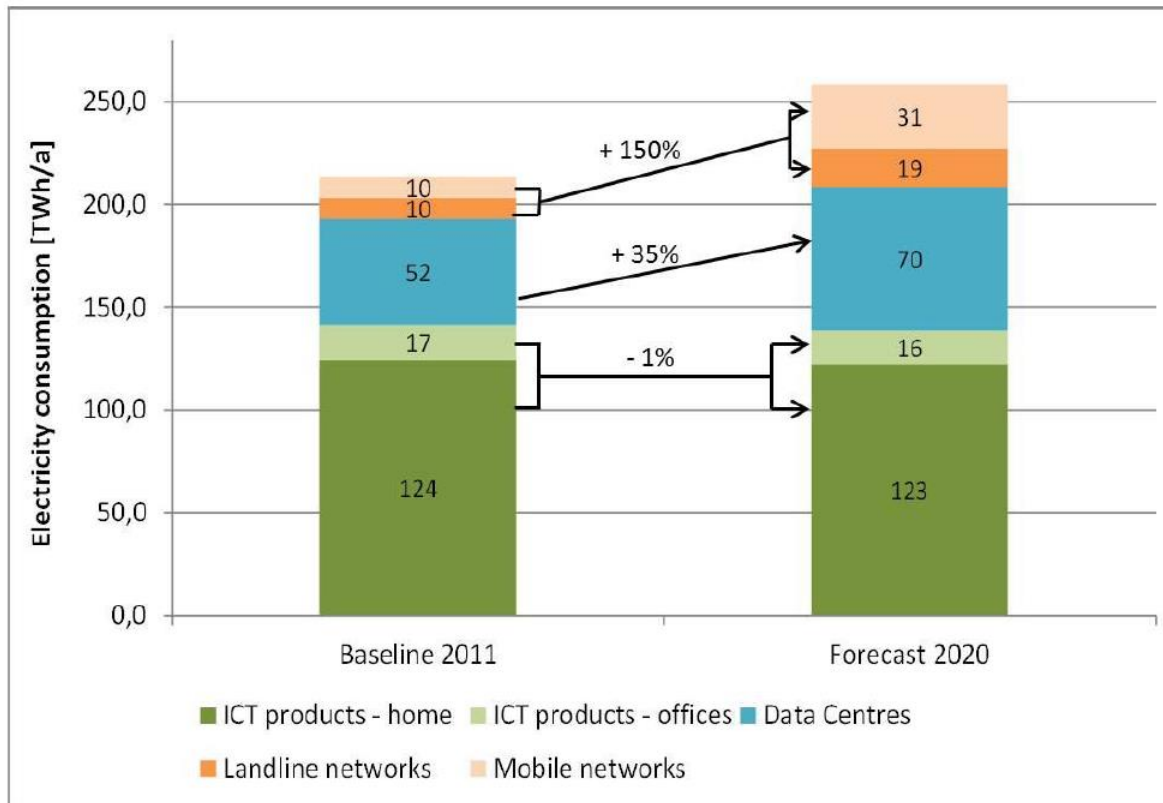
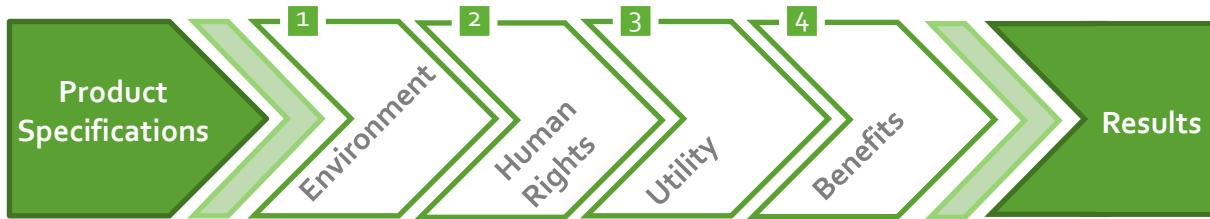


Figure 1 Comparison of the ICT-related electricity consumption in EU-27 in 2011 & 2020 (excluding ICT manufacturing)

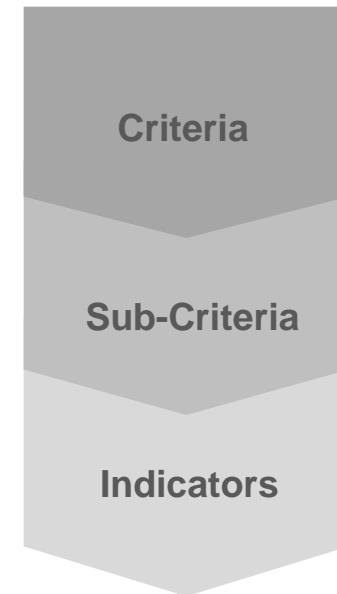
Structure



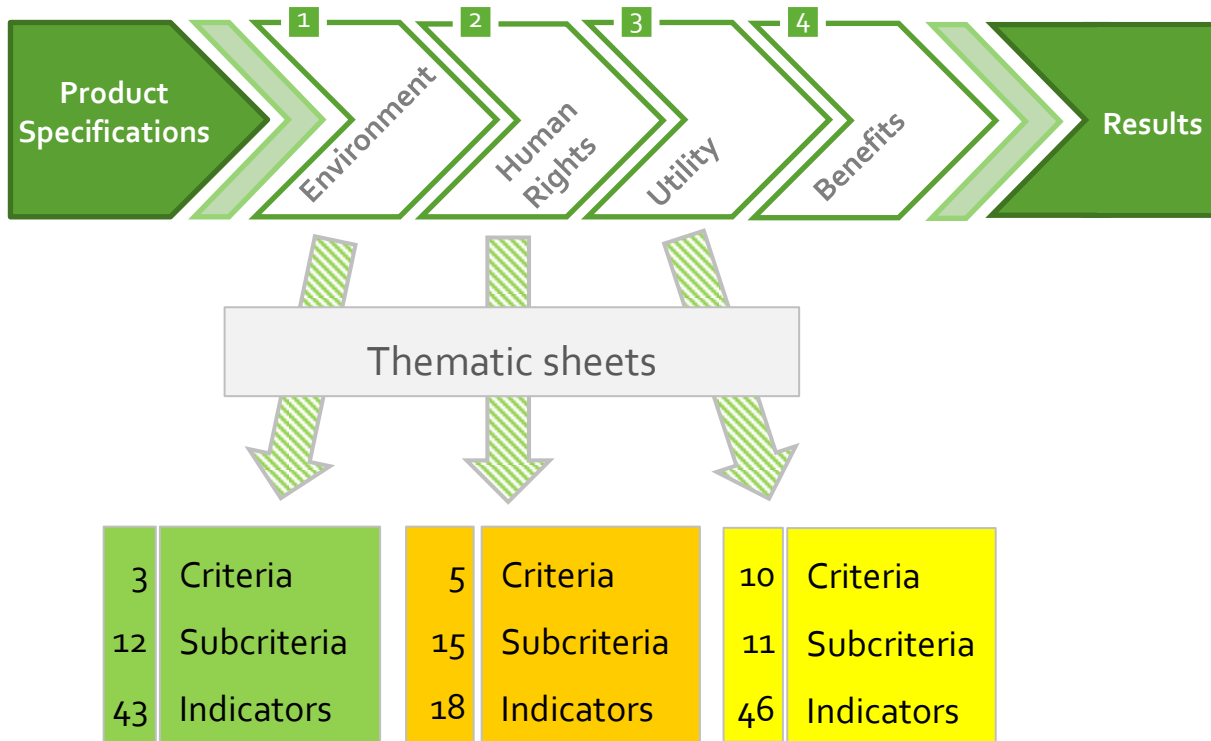
	A	B	C	D	E	F	G	H	I	J
	Criteria	Subcriteria	Indicators	Possible levels of achievement	Evidence		Score	Weighting and Applicability		
					internal	external		Hardware	Data Centre	Network
48		Longevity of products					40	20%	20%	25%
49			Durability: Is the product (technical) life-time higher than the average product in the market?	Yes (100) No (0)	Calculation of lifetime		100	30%	50%	50%
50			Warranty: Is minimum warranty offered beyond existing legal requirements?	Yes (100) No (0)	tbd		0	10%		
51			Modular product design: Is replacement of major components of the product for the purpose of performance improvement (upgrades) and repair possible without the use of special tools?	Yes (100) No (0)	tbd		0	10%		
52			Use-time extension: Are measures implemented for achieving the technical life-time of the product in the use-phase?	Yes (100) No (0)	tbd		0	30%	50%	50%
53			Spare parts: Are original or backwardly compatible spare parts available after the end of production of the product?	Yes (100) No (0)	tbd		0	10%		
54			Refurbishment and resale: Has the company a distribution for refurbished products to end-consumers?	Yes (100) No (0)	tbd		100	10%		

Selection of criteria and subcriteria

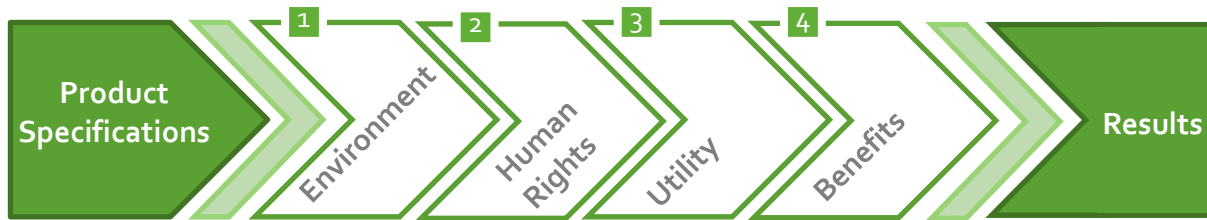
- **Fixed** set of criteria, subcriteria and indicators for networks, data centres, (end-user) hardware
 - Possibility for companies to choose sub-criteria and indicators would make the SASF arbitrary
- Aim to have most relevant criteria and sub-criteria included based on existing knowledge, standards, stakeholder involvement etc.
- Indicators are defined such that they apply to many different companies that may have more specific KPIs in place



Structure



Structure: Environment > Resource Conservation



C 1: Climate protection

C 2: Human health

C 3: Resource conservation

SC 3.1: Resource conserving production process

SC 3.2: Usage of eco-friendly materials

SC 3.2: Direct resource use

SC 3.4: Resource conserving packaging

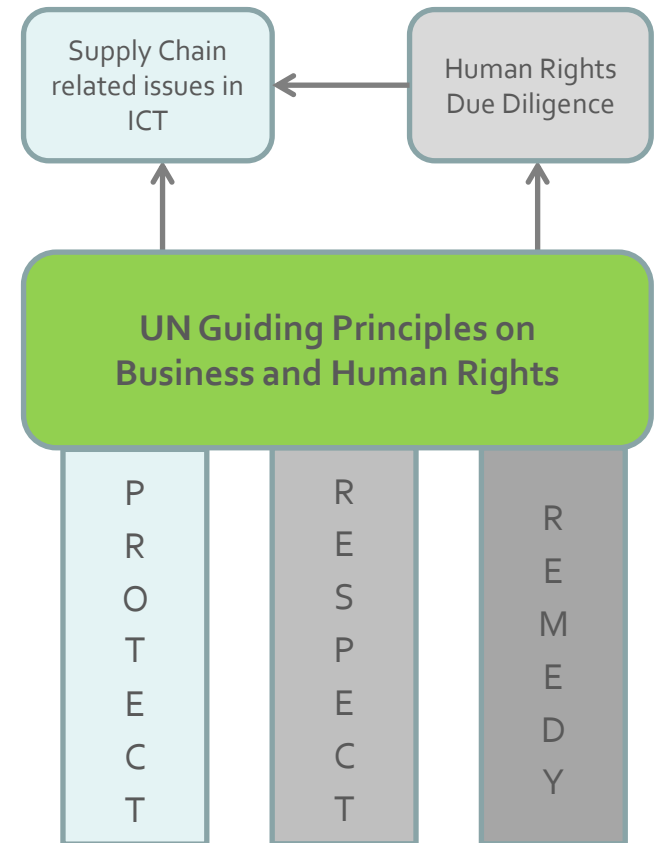
SC 3.5: Longevity of products

SC 3.5: Recyclability of products

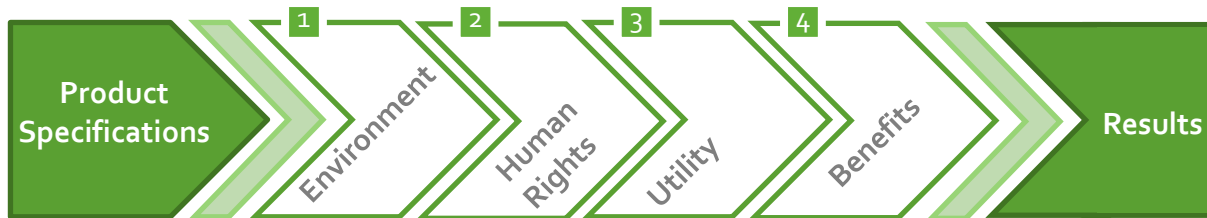
SC 3.6: Waste management

Structure: Human Rights

- Formerly, supply chain related issues concentrated on (contract) manufacturing.
- Since 2010, conflict mineral related issues get more and more important.
- In the future, supply chain issues will be dealt with the perspective of human rights due diligence approach.
- A due diligence approach should go beyond risk identification.
- Generally, measures should be designed according to the 3 pillars – protect, respect, remedy.
- This means that companies should endorse a human rights policy.
- But it should also focus on effective remedy measures.
- Applying the human rights due diligence approach to the telecommunication sector, a risk screening will yield following areas of risks: (see next slide).



Structure: Human Rights



C 1: Reduction of human rights risks in raw materials production

C 2: Reduction of human rights risks in manufacturing/ assembly

C 3: Reduction of human rights risks in recycling / disposal

C 4: Reduction of human rights risks associated with data security and privacy

C 5: Reduction of human rights risks associated freedom of expression

SC 1.1: Direct or indirect conflict financing

SC 1.2: Other forms of conflict risks (e.g. grievance driven violent conflicts)

SC 1.3: Health & safety risks for workers and neighbouring communities

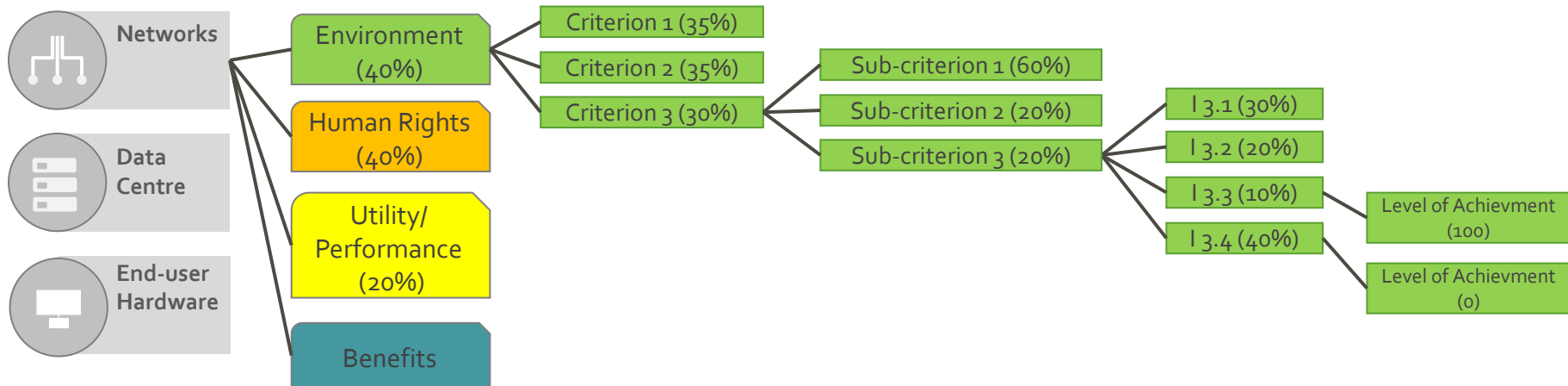
SC 1.4: Health & safety risks for workers and neighbouring communities

SC 1.5: Severe environmental degradation

SC 1.6: Active support of responsible mining projects

Weighting system: Where is weighting foreseen?

- Between:
 - components of the assessed product/service
 - thematic areas for each component
 - criteria in each thematic area
 - sub-criteria within each criterion
 - indicators within each sub-criterion
 - indicators
- Scoring for possible levels of achievement for each indicator



Recognition of benefits



- Not all products/services have additional benefits for the society, when compared to other similar products/ services offering same functionalities. If they do, usually in very distinct domains (e.g. energy consumption, CO₂ emissions, water consumption etc.).

	A	B	C	D	E	F
1	Criteria	Subcriteria	Indicators	Possible levels of achievement	Evidence	
11	Indirect environmental benefits	Optimization of travel and transport	Compared to currently and widely applied solutions, does the product on average across all customers significantly reduce travel or transport and corresponding GHG emissions without relevant rebound effects and are measures in place to ensure that these benefits are realized?	Yes, significant benefits are present and quantified through external critical review Yes, significant benefits are present and quantified, no external critical review Yes, significant benefits are present, but not quantified No, significant benefits are not present	Report verifying the realization of intended indirect benefits and the validity of any statements made	Critically reviewed report verifying the realization of intended indirect benefits and validity of any statements made
12		Dematerialisation	Compared to currently and widely applied solutions, does the product significantly contribute towards reducing materials and products of all kinds (e.g. paper, equipment) by providing alternatives, while taking possible rebound effects into account (example: product's own material impact)? It is ensured that these benefits are realized in practice.	Yes, significant benefits are present and quantified through external critical review Yes, significant benefits are present and quantified, no external critical review Yes, significant benefits are present, but not quantified No, significant benefits are not present	Report verifying the realization of intended indirect benefits and the validity of any statements made	Critically reviewed report verifying the realization of intended indirect benefits and validity of any statements made
13		Resource conservation in other sectors	Compared to currently and widely applied solutions, does the product significantly reduce resource consumption or emissions in other sectors (such as water, energy, agriculture), while taking possible rebound effects into account? It is ensured that these benefits are realized in practice.	Yes, significant benefits are present and quantified through external critical review Yes, significant benefits are present and quantified, no external critical review Yes, significant benefits are present, but not quantified No, significant benefits are not present	Report verifying the realization of intended indirect benefits and the validity of any statements made	Critically reviewed report verifying the realization of intended indirect benefits and validity of any statements made

Recognition of benefits



- The SASF measures performance, not absolute impacts. Benefits would be one piece in overall sustainability performance.
- Presence, extent and assurance of and valid statement on indirect benefits should be demonstrated through a dedicated analysis, ideally building upon established standards.
- According to the opinion of stakeholders, integrating benefits in the overall score would lead to distortion of the overall result.

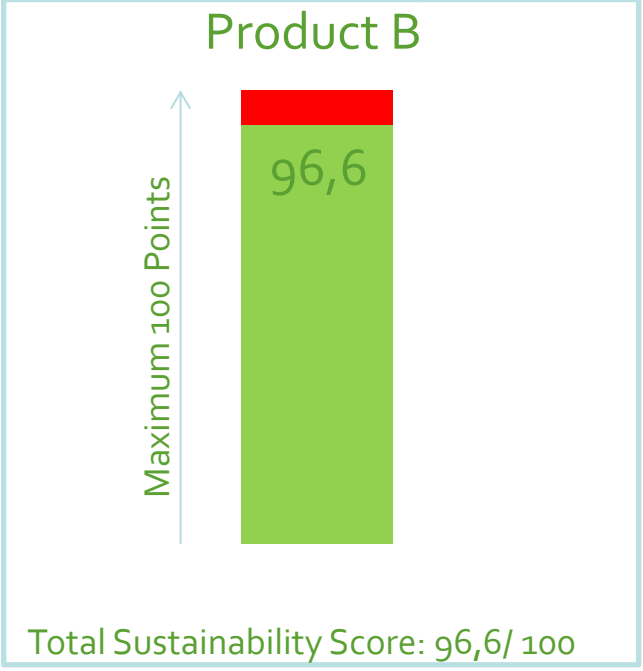
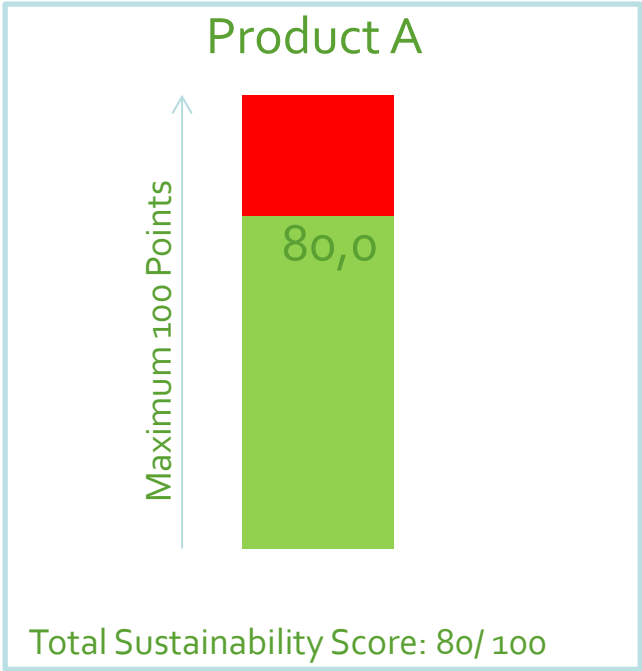
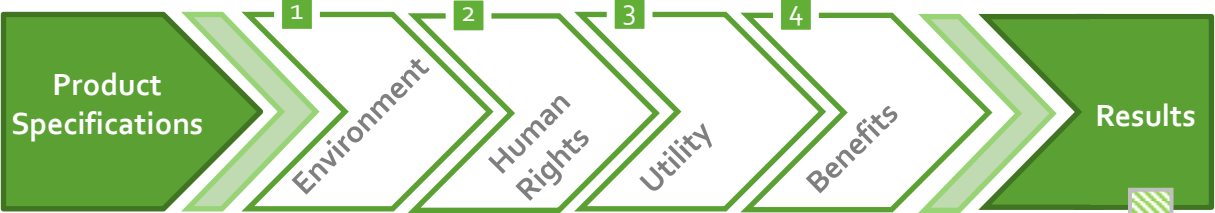
→ Integrating benefits on same rating scale not possible.

Solution

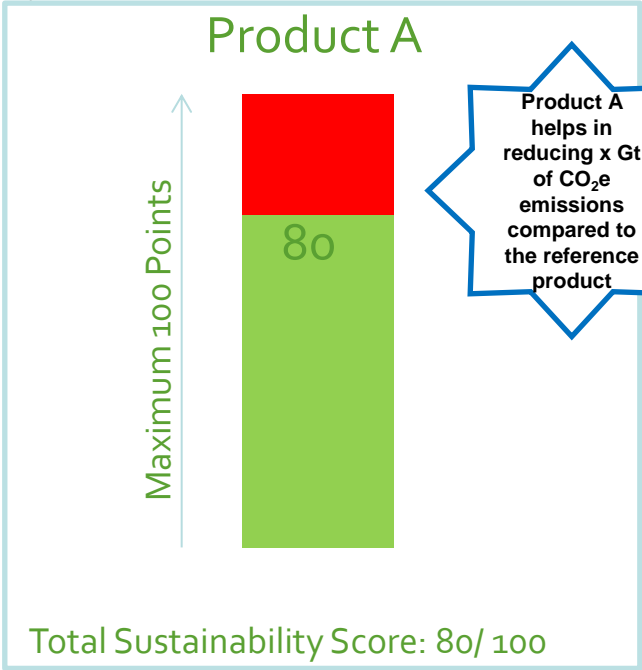
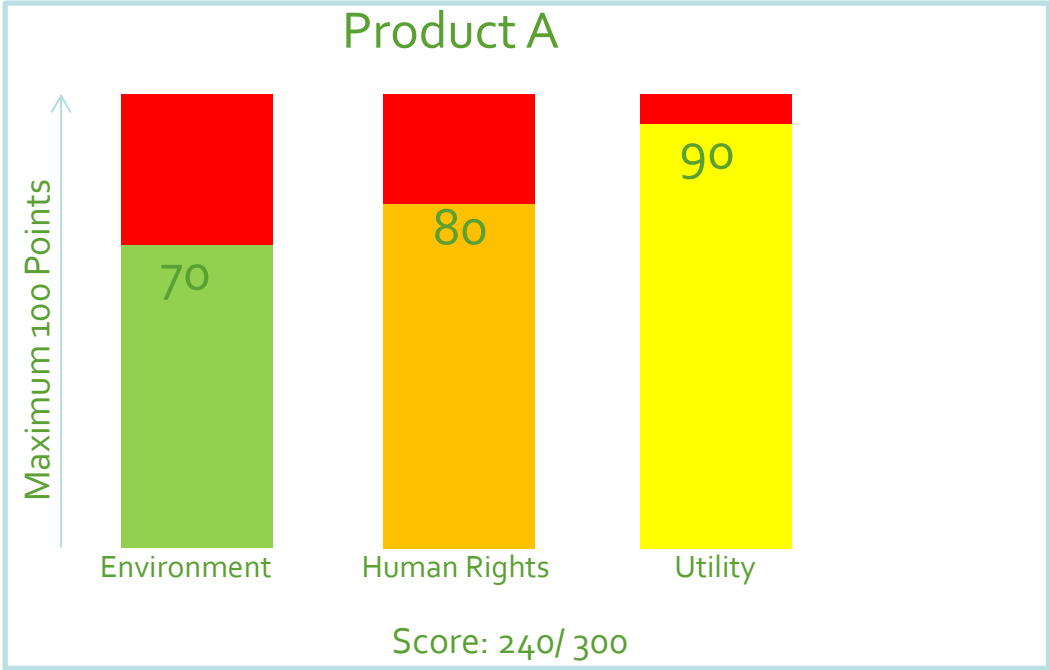
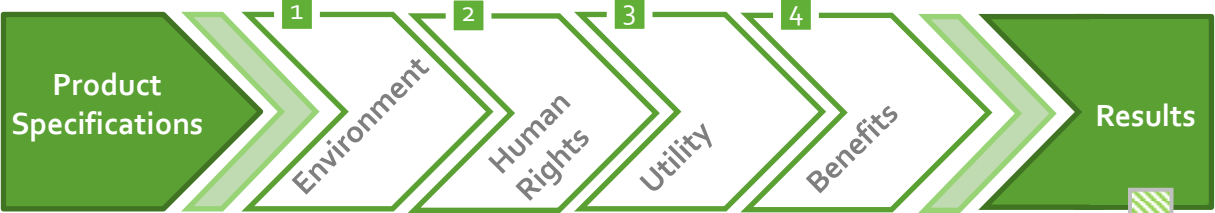
Communicate/
display benefits
separately

- Benefits of a product will have distinct and at best quantifiable advantages
- These are best captured in validated qualitative or quantitative statements
- Statement is merited if benefits are clearly demonstrated

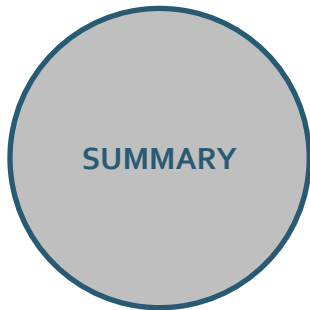
Results – First ideas



Results – First ideas



Key points summary



- SASF will support companies in policy decision making and the establishment of sustainable product portfolio.
- The assessment is based on four pillars: Environment, Human Rights, Utility and Benefits.
- Focus on three important components of ICT (Networks, Data Centre and End-User Hardware) allows for the definition of more specific indicators while being applicable to majority of ICT products.
- Fixed set of criteria, sub-criteria and indicators for networks, data centers, (end-user) hardware.
- The SASF measures performance, not absolute impacts. The integration of benefits on same rating scale not possible. Benefits are best captured in validated qualitative or quantitative statements.

Breakout Session I

TABLE SUMMITS: DISCUSSING CRITERIA, SUB-CRITERIA AND INDICATORS.

Breakout Session II

TABLE SUMMITS: DISCUSSING THE WEIGHTING SYSTEM.

Siddharth Prakash

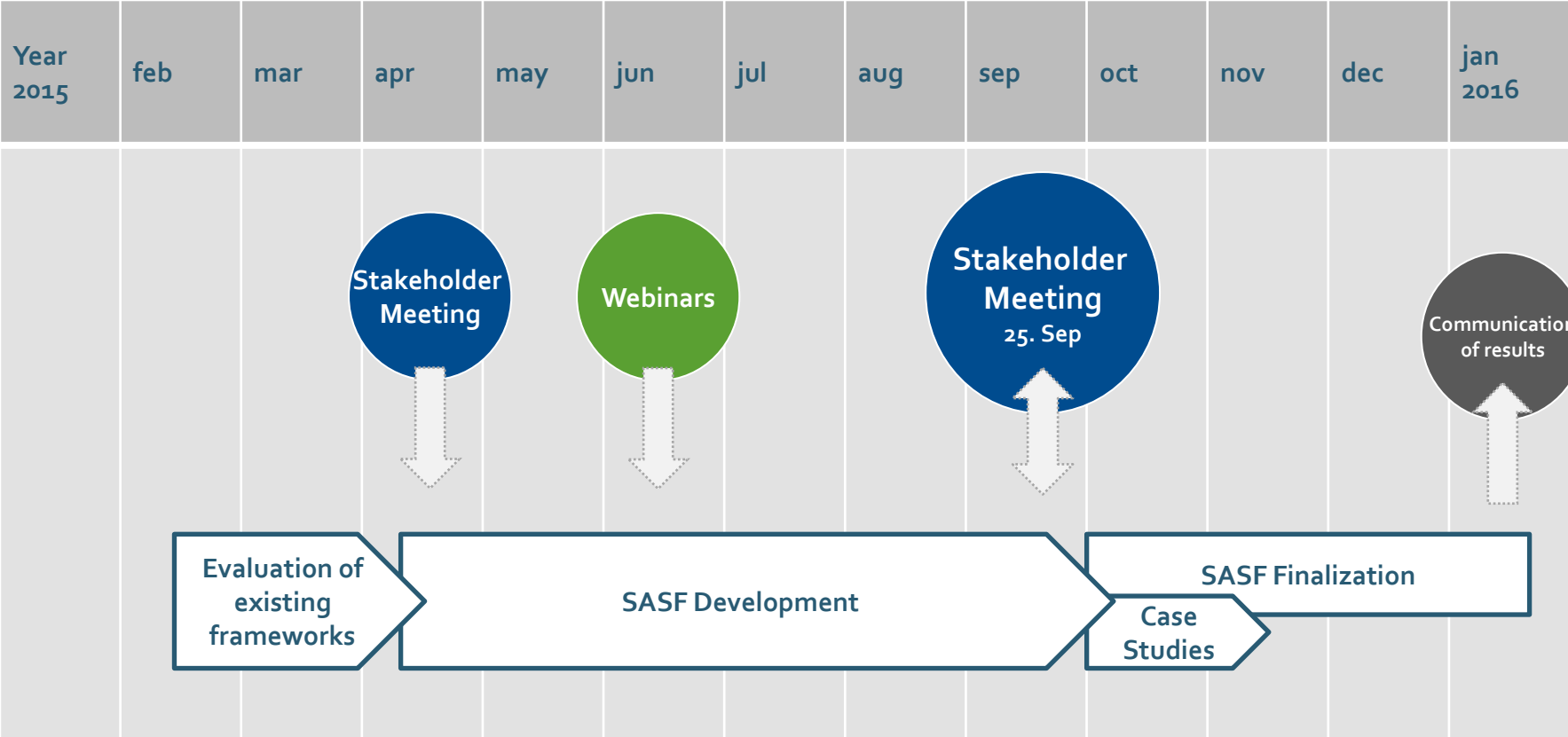
REFLECTION & LESSONS LEARNED FROM THE TABLE SUMMITS.

PANEL DISCUSSION: STEPS TOWARDS A SUSTAINABLE ICT SUPPLY CHAIN.

Danilo Riva

CLOSING REMARKS.

Next steps



All shared information are available on <http://gesi.org/portfolio/project/81>

THANK YOU FOR
YOUR ATTENDANCE
AND PARTICIPATION