

ICT related Technology Trends in Standardization – Identification, Evaluation and Implementation/Adaption 2014/15

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Agenda

- How to move technology trends to standardization?
- Tools in standardization to identify standardization-ready technology trends (example: ISO/IEC JTC 1)
- Lifecycle of standardization-ready technology trends

Structure of JTC 1's governance organizational entities

ISO/IEC JTC 1

JTC 1 on Directives

Rules and Procedures

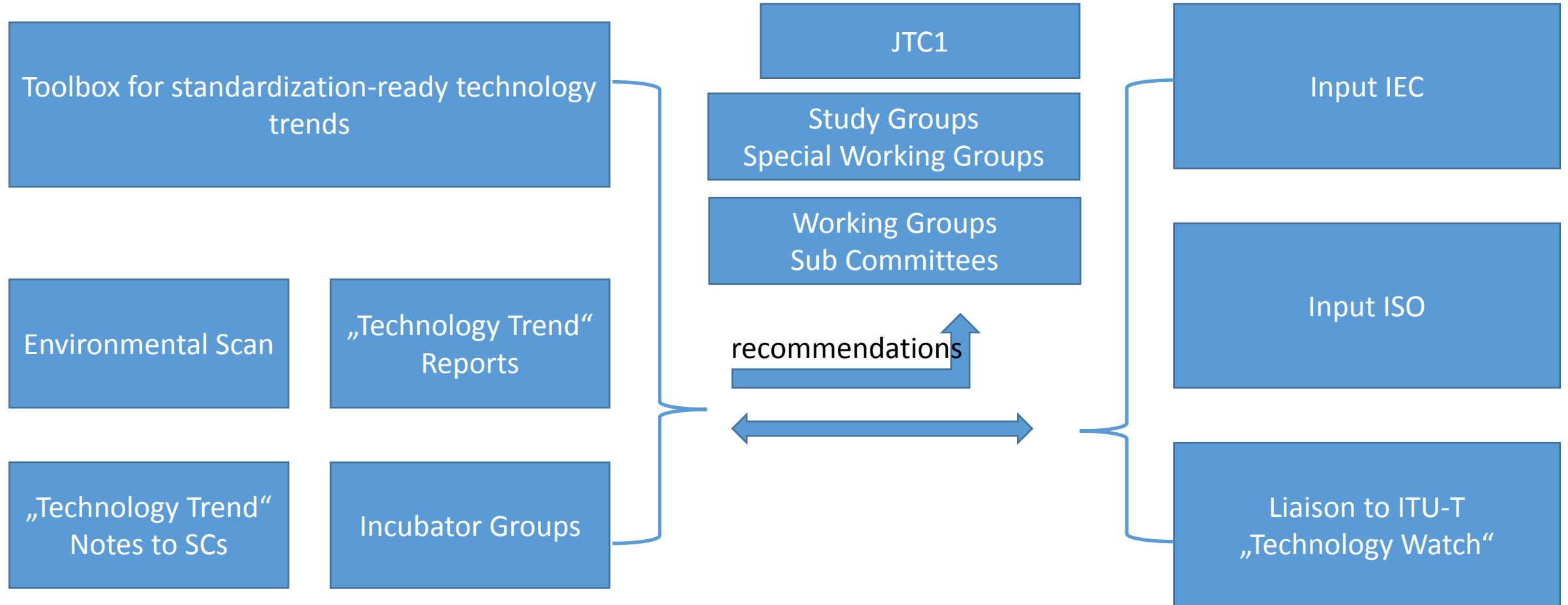
JTC 1 on Management

Solving current issues

JTC 1 on Planning

Identifying future work

Status quo: SWG on Planning tools to support perspective setting regarding standardization-ready technology trends and related input channels



First evaluation of SWG on Planning tools and input channels related to technology trends

Toolbox for standardization-ready technology trends

Environmental Scan (anual)	<p>The Internet of Everything: This topic is presently covered through the SWG on IoT.</p> <p>Cloud Computing in its various facets - Cloud/Client Architecture: This is already being addressed by the work of SC 38.</p> <p>Mobile Device Diversity and Management: To be discussed and decided.</p> <p>Cloud Computing in its various facets - Hybrid Cloud and IT as Service Broker: This is already being addressed by the work of SC 38.</p>
„Technology Trend“ Reports (TTR)	<p>3-D Scanning, Copying and Printing: This is an activity that SWG-P started to prepare a Technology Trend Report.</p> <p>Cloud Computing in its various facets - The Era of Personal Cloud: This is already being addressed by the work of SC 38</p>
„Technology Trend“ Notes to SCs	<p>Smart Machines - advanced global industrial systems: This is an activity that SWG-P started to prepare a Technology Trend Report.</p> <p>Software Defined Anything: SWG on Planning believes that this technology area is more a business topic than a standardization topic.</p>
Incubator Groups	<p>Smart Machines - contextually aware, intelligent personal assistants: This is an activity that SWG-P started to prepare a Technology Trend Report</p> <p>Smart Machines - smart advisors: This is an activity that SWG-P started to prepare a Technology Trend Report</p>

First evaluation of SWG on Planning tools and input channels related to technology trends

Toolbox for standardization-ready technology trends

Environmental Scan

„Technology Trend“
Reports (TTR)

Technology Trend Report (TTR) on 3 D Scanning and Printing – available Q2 2015
Technology Trend Report (TTR) Smart Machines – available Q2 2015

„Technology Trend“
Notes to SCs

Incubator Groups

First evaluation of SWG on Planning tools and input channels related to technology trends

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Environmental Scan

„Technology Trend“
Reports (TTR)

„Technology Trend“
Notes to SCs

Incubator Groups

TTN1 - 'Smart Machines - advanced global industrial systems'

TTN2 - 'Mobile Device Diversity and Management'

TTN3 - 'Smart Machines – Contextually aware, intelligent personal assistants'

TTN4 - 'Cloud Computing in its various facets - Cloud/Client Architecture'

First evaluation of SWG on Planning tools and input channels related to technology trends

Toolbox for standardization-ready technology trends

Environmental Scan

„Technology Trend“
Reports (TTR)

„Technology Trend“
Notes to SCs

Incubator Groups

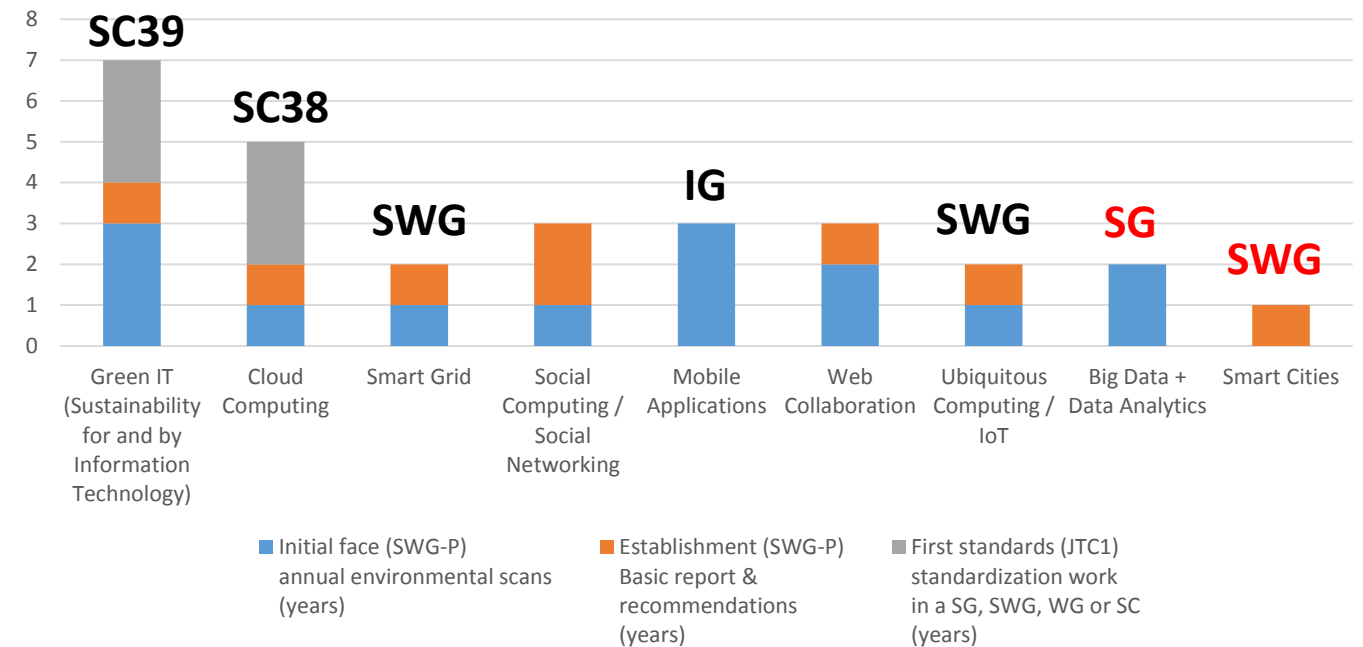
Incubator Group on Mobile Application '

Hype cycle of standardization-ready technology trends

SWG on Planning activities for Technology Trends evaluation		Year						
No	Technology Trends identified	started	discussed until	topic belongs to	report to Plenary	Topic linked to a SC, SWG, Incubator, etc initiated	New SC, SWG, Incubator, etc initiated	closed in SWG-P
1	Green IT/Green ICT/IT for Green/Green of ICT	2008	2011		2008/2009 /2010/2011	2011	2011	2011
2	IT contributions to sustainability	2008	2009	1	2008/2009		2011	2011
3	Nano materials & risk management in the context of IT	2008	2008		2008			2008
4	IT in consumer electronics	2008	2008		2008			2008
5	Robot technologies and sensor networks	2008	2008	8	2008			2008
6	Natural language support	2008	2008		2008			2008
7	IT standards and education	2008	2008		2008			2008
8	Intelligent Systems, Robotics (including Sensor Technologies)	2009	2010		2009/2010			2010
9	Design for All/Assistive Technologies	2009			2009			2009
10	Cloud Computing	2009	2009		2009/2012	2012	2010	2012
11	Content Format, Management & Interoperability at the Semantic	2009	2009		2009			2010
12	Energy Efficiency of Data Centers	2009	2009	1	2009		2010	2011
13	Smart Grid	2009	2009	1	2009		2010	2011
14	Advanced Analytics	2010	2010		2010			2010
15	Client Computing	2010	2010	10	2010	2011		2010
16	Social Computing / Social Networking	2010	2013		2010/2011/ 2012/2013			2013
17	Security – Activity Monitoring	2010	2010		2010	2011		2010
18	Flash Memory	2010	2010		2010	2011		2010
19	Virtualization for Availability	2010	2010	10	2010	2011		2010
20	Mobile Applications	2010	2012		2010/2011/ 2012/2013		2013	2012
21	IT Everywhere	2010	2010		2011			2010
22	Augmented Reality (AR)	2010	2011		2011	2012		2012
23	3D Image Technology	2010	2011		2011	2011		2011
24	Web Collaboration	2010	2013		2010/2011/ 2012/2013			2013
25	Applications for tablets/smartphones	2011	2011	20	2011		2013	2012
26	Social Publishing and Feedback	2011	2011	16	2011			
27	Growth in popularity of video	2011	2011		2011	2011		2011
28	Next Generation Analytics	2011	2012		2011/2012	2012	2013	2012
29	Social Analytics	2011	2011		2011	2011		2011
30	Context Aware Computing	2011	2011		2011	2011		2011
31	Storage Class Memory	2011	2011		2011	2011		2011
32	Ubiquitous Computing	2011	2012		2011/2012		2012	2012
33	Fabric-Based Infrastructure and Computers	2011	2011		2011	2011		2011
34	Internet of Things	2012	2012	32	2012		2012	2012
35	Big Data	2012	2012		2012	2013	2013	2012
36	Mobile-Centric Applications and Interfaces	2012	2012	20	2012		2013	2012
37	Media Tablets and Beyond	2012	2012	20	2012		2013	2012
38	Extreme Low-Energy Servers (and devices)	2012	2012	1	2012	2012		2012
39	In-Memory Computing	2012	2012		2012			2012
40	Contextual and Social User Experience	2012	2013	16	2012/2013			2013
41	App Stores and Marketplaces	2012	2012	20	2012		2013	2012
42	Smart Cities	2012	2013		2013		2013	2013
43	Enterprise App Stores	2013	2013		2013			2013
44	Hybrid IT and Cloud Computing	2013	2013	10	2013			2013
45	Strategic Big Data	2013	2013	35	2013	2013	2013	2013
46	Actionable Analytics	2013	2013	35	2013	2013	2013	2013

red numbers: in case an Incubator group/ SG will be established

Technology Trends initiated by SWG on Planning (examples)



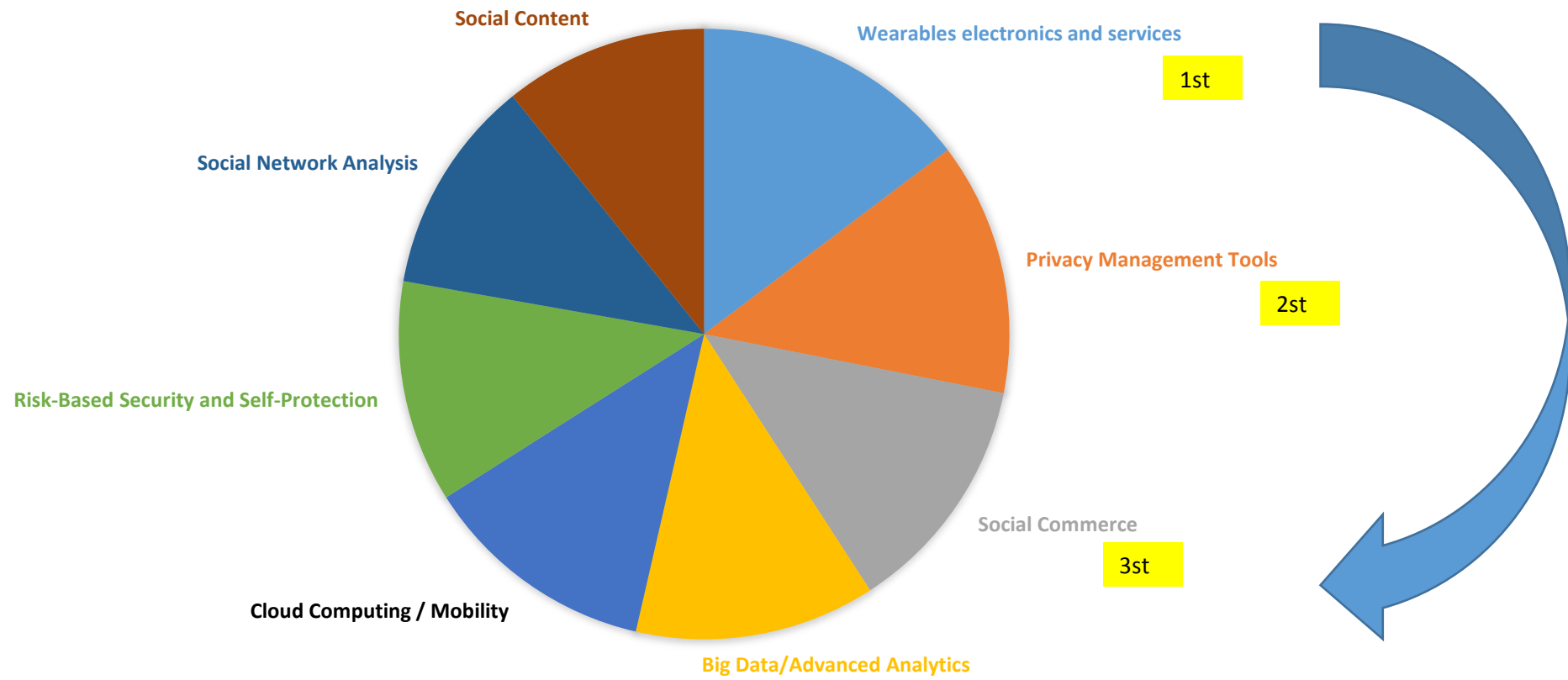
SC .. = Sub Committee; IG .. = Incubator Group;
SWG .. = Special Working Group; SG .. = Study Group

Special Working Group on Planning – topics 2015

- ~~Smart water management~~
- ~~Smart Industry~~
- **Cloud Computing/Mobility** – Gartner calls it: **Computing Everywhere**
- **Big Data/Advanced Analytics** – Gartner calls it: **Advanced, Pervasive and Invisible Analytics**
- **Risk-Based Security and Self-Protection**
- **Social Business** with a especial focus on **Social Network Analysis, Social Content and Social Commerce**
- **Wearables electronics and services**
- **Privacy Management Tools**

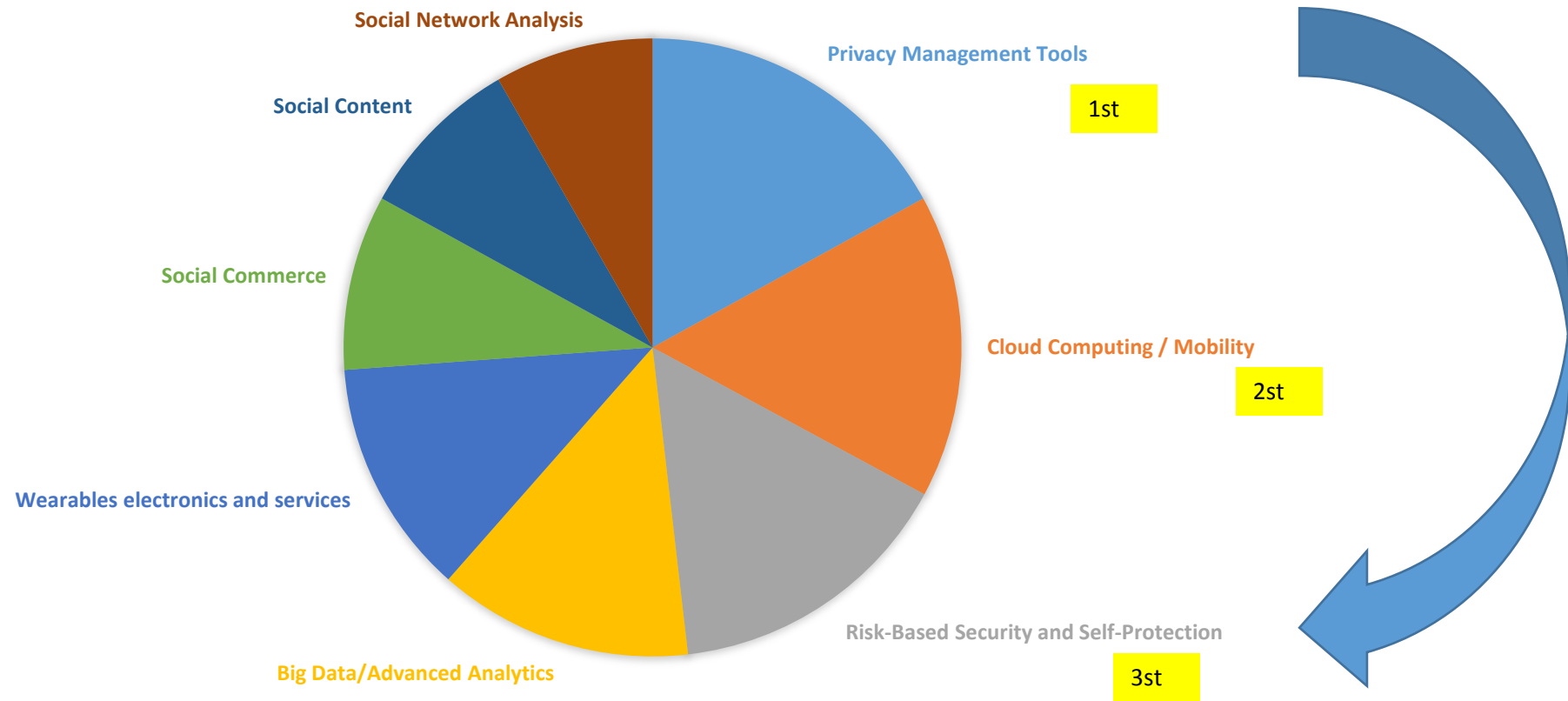
JTC 1 Environmental Scan 2015 I

ENVIRONMENTAL SCAN 2015 - DRAFT RESULTS
SHOULD THIS TOPIC BE CONSIDERED FOR FUTURE WORK IN JTC1?



JTC 1 Environmental Scan 2015 II

JTC 1 ENVIRONMENTAL SCAN 2015 - DRAFT RESULTS -
WHICH OF THESE TRENDS ARE MOST RELEVANT TO JTC 1?



<http://freeonlinesurveys.com/s.asp?sid=s13f3hu9nxk3f3q605629>

谢谢！

Thank you!

감사합니다!

ありがとう！

Danke!

Merci!

¡Gracias!

Obrigado!