ITU-T L. 1440 Factsheet

How do I use this methodology? Ask for support!

	ITU-T L.1440 - Recommendation ITU-T L.1440: Methodology for environmental impact assessment of information and communication technologies at city level	
Name of Initiative/Methodology	Recommendation ITU-T L.1440: Methodology for environmental impact assessment of information and communication technologies at city level	
Link to the latest published version	L.1440 (10/2015): Version 1.0 http://www.itu.int/ITU-T/recommendations/rec.aspx?rec=12431	
Developed by	The International Telecommunication Union (ITU)	
History and Status	• Approved in October 2012 • Publicly available and used	
Involved companies / parties	• The Study Group 5 of ITU-T is responsible for studying ICT environmental aspects of electromagnetic phenomena and climate change. • The SG5 includes Huawei, Hitachi, Telecom Italia, Orange, Littelfuse, Ericsson, Epcos AG, the JRC, TU Budapest, Aalto University, ETRI, NTT	
Scope	✔ **Organisation env. accounting** ✔ Scope 1 ✔ Scope 2 (partial) ✔ Scope 3 (partial)	**Product env. assessment** ✖ Life cycle approach ✖ Use phase only
	✔ GWP ✖ Energy (focus on secondary energy)	✖ Other environmental impacts ✖ KPIs
System(s) covered by the methodology	o ICT-related greenhouse gas and energy consumption at city level, in particular: • First order effects of ICT used in organisations and/or households • First and second order effects of ICT projects and/or ICT services in the city, e.g. in industrial sectors (transport, waste management, etc.)	
Goals	o Identifying the scope to be assessed, depending on the purpose of the assessment o Providing guidance on the framework for the quantitative assessment at city level of first and second order effects of ICT; and the qualitative assessment of other effects o Providing information to city authorities, policy-makers and environment experts	
Generic features	• The GHG and energy effects should be considered for the operation of ICT in the full life cycle rather than only the use stage. An intermediate level can be defined, provided that assumptions are transparently stated. • Assessment boundaries shall be well defined in order to avoid the accounting of activities not directly concerning the city and to avoid double accounting • The recommended assessment period is one year • If the number of organisations within the city boundaries is too large, it might be preferable to establish the assessment gradually and restrict the assessment (priority being given to large organisations, organisations with large environmental impacts or with a large presence of ICT) • Data compliant with criteria of quality and assessment defined in [ITU-T L.1410] take precedence over other data • Energy mixes should be representative of the goal and scope of the assessment, for all life cycle stages; for the use stage, the emission factor should reflect the energy mix of the city as closely as possible • When interpreting the results, the practitioner should analyse to what extent changes in GHG emissions level are due to the change in emission factors • Guidance is provided for the qualitative assessment of **other impacts**, i.e. related to the behaviour and behavioural changes of citizens, as well as structural changes linked to the use of ICT (incl. rebound effects)	
ICT-specific features	• The allocation for ICT products serving users both inside and outside the city boundaries may vary: ◦ If considering first order effects only, the allocation is based on the location of ICT products (rather than the location of the users). This is preferred when assessing the impacts related to data centres. ◦ If considering first and second order effects, the allocation is based on the location of the users of ICT products • For each ICT good, the various modes of use (e.g. operation, idle state, deep sleep and off) should be considered when assessing the impact of the use stage. However, some simplifications could be made and then need to be transparently described	
Examples of implementation / experience feedback	None identified – to be filed later	
Interaction with other methodologies	• [ITU-T L.1400] Overview and general principles of methodologies for assessing the environmental impact of information and communication technologies • [ITU-T L.1410] Methodology for environmental impact assessment of information and communication technology goods, networks and services • [ITU-T L.1420] Methodology for energy consumption and greenhouse gas emissions impact assessment of information and communication technologies in organizations • [ITU-T L.1430] Methodology for assessment of the environmental impact of information and communication technology greenhouse gas and energy projects • [C40] Global protocol for community scale greenhouse gas emission inventories	

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