EMC and Standardization overview

EIC Project team

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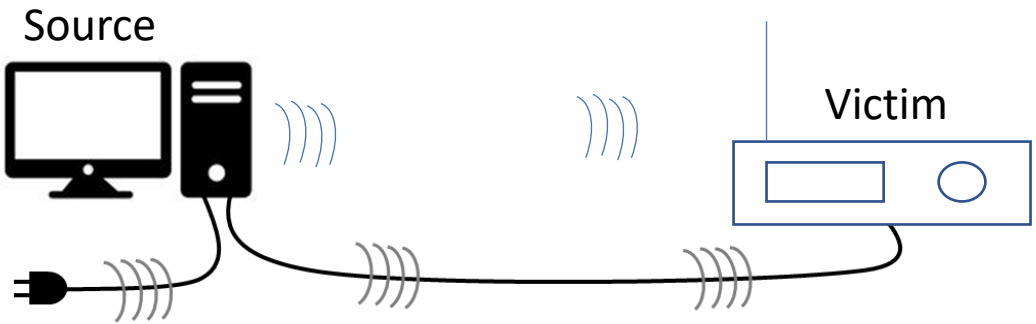
What is EMC ?

- Equipment emits [radiates] an unintended RF signal outside the band of its normal operation that affects the performance of a separate piece of equipment
- For Broadcasters the victim is normally a radio or television receiver
- EMC is about predicting, assessing, and preventing future issues from new technology. Changes in existing technology are monitored in the same way
- Key targets are the creation of, and updates to, Standards and Regulations which meet the needs of broadcasters
- It is much cheaper and easier to prevent than to cure



Standardisation process and the EBU's role

Regulations and Standards

International Regulation

International bodies (WRC-ITU-R) set overarching rules

- Individual countries implement rules in National Regulations
- Many countries use International Recommendations or Standards (ITU-R, CISPR) to establish requirements under their Regulations

EMC-related Regulation and Standardisation

	Regulation	Standardisation
International	ITU-R	IEC/CISPR
Regional	CEPT (and EU)	CENELEC , ETSI
National	NTRA	National Standards

Regulatory bodies and related activities

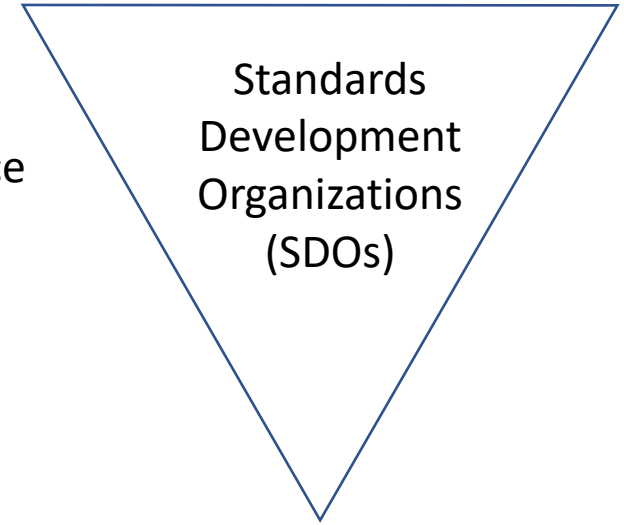
	Regulation	Activities
International	ITU-R (SG1)	Frequency ranges Protection requirements
Regional	CEPT (WGSE and WGMF) EU	Limits of radiation EU New Approach Directives EMC D and RED
National	NTRA	Limits of radiation

Standardisation and voting processes

	Standardisation body	Voting process
International	IEC/CISPR	One country *one vote* Approval requires >66% yes votes
Europe EMC D	CENELEC (requirements based on CISPR standards)	Weighted National Committee Voting Largest countries 27-29 Medium countries 7-14 Small Countries 3 or 4 Approval requires >66% yes votes
Europe RE-D	ETSI (requirements based on CEPT standards)	

EMC Standards Stakeholders

In different Standards Development Organizations different stakeholders have different objectives



Drivers for Manufacturers
Reduced cost of testing
Reduced cost of compliance
Reduced risk of failure
Reduced risk of recall
Level playing field

Drivers for Regulators
Level playing field
Clarity of requirements
Ease of testing
Market Surveillance

Drivers for Service Providers
Protection of existing services
Protection of future services
Cost of interference cases

For further information contact the EIC project team:
https://tech.ebu.ch/groups/eic