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|  | INTERNATIONAL TELECOMMUNICATION UNION  **TELECOMMUNICATION STANDARDIZATION SECTOR**  STUDY PERIOD 2022-2024 | | | | | SCV-LS24 |
| **SCV** |
| **Original: English** |
| **Question(s):** | | --- | | | | Geneva, 16 February 2024 |
| **(Ref.:)** | | | | | | |
| **Source:** | | Standardization Committee for Vocabulary/Coordination Committee for Terminology | | | | |
| **Title:** | | LS/r on TERMS CONTAINED IN ITU-T SG5 DRAFT RECOMMENDATIONS | | | | |
| **LIAISON STATEMENT** | | | | | | |
| **For action to:** | | | | ITU-T SG5 | | |
| **For information to:** | | | | All ITU-T Study Groups | | |
| **Approval:** | | | | SCV meeting (17 January 2024) | | |
| **Deadline:** | | | | --- | | |
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| **Abstract:** | Through this document, the SCV advises ITU-T SG5 on terms 'threat mitigation' and 'vulnerability', and forwards editorial comments on definitions shared in SG5-LS115. |

The SCV thanks ITU-T SG5 for their Liaison Statement ITU-T SG5-LS115 (also [CCT/51](https://extranet.itu.int/rsg-meetings/ccv/Share/CCT%20meeting%202024-01-17%20(SCV%20only)/Input%20contributions/051e.docx)). The liaison statement was addressed at the 17 January 2024 meeting of the SCV.

After considering the terms, the SCV suggests that ITU-T SG5 adds qualifiers to the terms 'threat mitigation' and 'vulnerability' to differentiate them from the same terms as understood in other contexts such as that of ITU-T SG17.

Additionally, the SCV would like to forward the attached editorial comments from the CCT Secretariat and from the ITU-T SG5 rapporteur for vocabulary, Mr Haim Mazar, that have been identified for some of the terms. Mr Mazar’s comments are shown in blue font.

Annex: 1

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Annex to SCV LS24

Editorial comments to terms and definitions being developed by ITU-T SG5

The editorial comments to terms and definitions being developed by ITU-T SG 5 are provided in the column labelled ‘Editorial comment from CCT Secretariat’.

| **Term** | **Definition as forwarded to CCT** | **Editorial comment from CCT Secretariat** |
| --- | --- | --- |
| **Adjustable Capacity Assessment** | It refers to the virtual power plant operator's ability to optimize the active power adjustment capacity of its agent adjustable resources by virtual power plant aggregation according to the requirements of grid dispatch or market demand, including upward and downward adjustment capacity. Adjustable capacity assessment includes peak adjustment adjustable capacity assessment and frequency adjustment adjustable capacity assessment. | Try to reduce complexity. Use one sentence. Information could be moved to a note or within the Recommendation's main parts. |
| **Aggregation Platform** | Aggregators platforms are responsible for collecting, aggregating and managing multiple distributed energy resources, operating and trading them as a whole. They interface with energy markets and grid dispatch centers to participate in energy trading and market operations to achieve optimal energy dispatch and economic efficiency, with real-time monitoring, automatic power control, market transaction declaration, collaborative instruction issuance, operation control, statistical query, metering and billing. | This explains the function or what the term does, but does not define the term. |
| **Array Controller Unit** | Monitor and manage PV systems and energy storage systems (ESSs), it converges all ports, converts protocols, collects and stores data, and centrally monitors and maintains the devices in the systems. | This explains the function or what the term does, but does not define the term. |
| **Base Station Power Management System** | The base station power management system is used to monitor and control the equipment status of the base station. The base station power management system communicates and interacts with the base station power supply and receive power commands from the aggregation platform. After receiving the control command, the base station power supply controls the charging and discharging of the straight-through lithium batteries and lead-acid batteries to satisfy the power demand from the power grid, and at the same time, the AC meter communicates and interacts with the base station power supply and measures and collects the power changes of the base station and submits them to the aggregation platform. | The term is not actually defined.  Take out the text starting with ‘After receiving the control command…’ till the end of the definition should go in a note. |
| **Centralisation** | data, function, process, system where a single entity, or a small group of them, has exclusive control or responsibility for it. | Maybe specify what 'it' stands for. |
| **Continuous emission monitoring system (CEMS)** | CEMS is the total equipment necessary for the determination of GHG emission rate using pollutant analyzer measurements and a conversion equation, graph, or computer program to produce results in units of the applicable emission limitation or standard. | ‘CEMS is the’ is not necessary, as it repeats the term.  Expand the abbreviation greenhouse gas for GHG. |
| **customer** | individuals or organizations that have purchased products for their own internal use. |  |
| **data sanitization** | the process of deliberately and irreversibly deleting or destroying any data stored in memory on a device to render it unrecoverable⁠. |  |
| **DC-DC Converters** | DC-DC is a direct current-direct current conversion. It's a conversion process to convert one DC voltage to another DC voltage. | Repetitive. Retain only the second sentence |
| **Digital Product Passport** | A structured collection of product-specific data conveyed through a unique identifier. Definition based on European Commission documents [b-Gala2021] and [b-EC2022]. | The second sentence should go in a note. |
| **digital product passport (DPP) provision** | the process and responsibility of collecting, creating, maintaining, validating, storing and delivering data from source(s) to targets, which includes the provision of a service and managing the data related to it. |  |
| **digital product passport (DPP) supplier** | any product operator that is also responsible for DPP provision (supply) the associated data that is part (included or linked) in a DPP. NOTE - Product operator can be a manufacturer, refurbishment service provider, or importer who introduces the product into the market, whereas an external third-party DPP service provider is not considered as a DPP supplier as they are not primarily responsible for the product details contained in the DPP | A connector seems to be missing in the first sentence.  The NOTE should go in a note in this Recommendation. |
| **Distributed nodes** | Collecting the engineering parameters of base stations within the jurisdiction area, real-time raw data on the interference experienced by the base stations, forming inter-regional interference path relationship information, and parsing key interference data to transmit back to the network’s central control node. | The term is not actually defined. |
| **Dynamic monitoring** | Monitoring and detecting the daily temporal and spatial variation of greenhouse gas (GHG) emission data using multi-source data. |  |
| **Economic operator** | include the manufacturer, authorised representative, importer, distributor, fulfilment service provider, or any legal person with legal responsibility in relation to manufacture. Adapted from [b-EC2020]. | The term is not actually defined. |
| **electromagnetic emanations security (EMSEC)** | Physical measures to keep confidentiality by prevention of signals emanated from a system, particularly blocking electromagnetic radiation. Note - In this Recommendation, EMSEC means only information leakage due to unintentional electromagnetic emission | Do you mean 'by preventing signals from emanating from a system' ?  The Note should go in a note in this Recommendation. |
| **Energy Efficiency** | The amount of power (or energy in a given time period) required for processing (switching, routing, transporting, etc.) data with a given bit rate. The dimension is W/Gbps | The units can go in a note |
| **Energy Efficiency Indicator for a Micro Data Centre** | a metric used to assess and quantify the energy efficiency of a micro data centre. This metric can be calculated based on the relation of server CPU utilization and PU | The second sentence is not necessary in the definition. |
| **Environmental Impact Assessment** | A process of evaluating the positive and negative environmental impacts of a proposed project or development. |  |
| **equity share** | An equity share is defined as the percentage of economic interest in, or benefit derived from a facility. | ‘An equity share is defined as’ is not necessary, as it repeats the term. |
| **FEMS** | A system that monitors and analyses energy consumption by collecting energy-related data on the production process, and furthermore, minimizes energy consumption by controlling facilities and improving the operation of the factory | There seem to be two concepts in the definition. Expand the abbreviation in the term. |
| **free of charge** | no financial charge by a manufacturer, their authorized representatives or importers. |  |
| **Global Digital Sustainable Product Passport** | The subset of a digital product passport, global in regional scope, focused on environmental sustainability aspects |  |
| **Grid Dispatch Center** | The Grid Dispatch Center is the body responsible for monitoring, dispatching and controlling the operation of the power system to ensure the safe and stable operation of the grid and to coordinate the balance between supply and demand. It is the main body that releases the peak and valley power demand, corresponding to the dispatching center unit of each provincial power grid. | Retain only the first sentence (without repeating the term) |
| **Guard Period (GP)** | The guard period is the time interval when the TDD base station switches from the transmitting function to the receiving function.  NOTE 1 It is mainly used to protect uplink signal will not suffer the interference from the downlink signal. NOTE 2 When tropospheric radio-duct exists, the duration of GP determines the protection distance between base stations | ‘The guard period’ is not necessary, as it repeats the term.  Notes 1 and 2 should go as notes in this Recommendation. |
| **hazardous waste** | Wastes defined as hazardous under the Basel Convention. (See Article 1 of the Convention). This includes wastes containing lead, mercury, cadmium and other hazardous substances which may be released into the environment.  NOTE – For more information on hazardous waste and hazardous waste classification, refer to clause 7.1.1 | Reduce to one sentence + notes in the Recommendation |
| **ICT activities** | ICT activities are defined as activities directly related to the design, production, promotion, sales or maintenance of ICT goods, networks or services, or related to the use of ICT goods, networks or services for the benefit of the organization. | expand ICT. ‘ICT activities are defined as' is not necessary, as it repeats the term. |
| **infrastructure equipment** | All the active equipment and passive item needed to realize a network: NOTE 1: active equipment for example are radio access network elements, e.g., antenna, base transceiver stations and radio network controllers  NOTE 2: passive elements of the network infrastructure for example can be: masts, containers, towers, power supply and air conditioning equipment | Notes 1 and 2 should go as notes in this Recommendation |
| **Intelligent Gateway** | An intelligent gateway is a device used to connect different networks and protocols inside a communication base station and provide intelligent routing and conversion functions. It provides functions such as network connection and conversion, routing and forwarding, protocol conversion and compatibility, security and management, data optimization, and traffic management. | Retain only the first sentence (without repeating the term) |
| **latest available version** | the latest version of firmware or security update to the firmware, as applicable, that the manufacturer determines at their discretion is the latest version, and has made generally available for all customers of a product model, which has been placed on the market by a manufacturer. | Try to reduce complexity. Information could be moved to a note or within the Recommendation's main parts. Maybe add a qualifier to the term. |
| **Lithium Battery With DC-DC Converters** | Lithium battery with DC-DC is a battery system that converts DC energy output by lithium batteries to different voltage levels through DC-DC converters. It provides stable and qualified power supply for equipment and systems, with high efficiency and protection. | ‘Lithium battery with DC-DC’ is not necessary, as it repeats the term.  Reduce to one sentence + notes |
| **Micro Data Centre** | A smaller or containerized data centre, designed to provide processing, storage, and networking capabilities in a more compact and modular form.  Note: Micro data centres are typically deployed to address specific needs such as edge computing, where computing resources are placed closer to where data is generated or needed. This can improve performance, reduce latency, and enhance overall efficiency for applications that require real-time processing or low-latency communication. | The Notes should go as note in this Recommendation. |
| **Network center control node** | It is the data aggregation center of distributed nodes, with the functions of aggregating and analyzing interference data and issuing adjustment instructions. |  |
| **Network Sharing and Co-Construction** | A collaborative approach where multiple individuals or organizations come together to jointly build and share a network infrastructure or resources.  NOTE 1.- It involves the active participation and contribution of all stakeholders to create and maintain the network, with the aim of achieving common goals and benefiting from shared resources and expertise. NOTE 2 –The sharing concept is often applied in areas such as telecommunications, transportation, and information technology, where the pooling of resources and knowledge can lead to more efficient and cost-effective solutions. | Notes 1 and 2 should go as notes in this Recommendation. |
| **Nominal discharge current under microclimate conditions, *I*nm** | crest value of an 8/20 current impulse through an SPDM’s mode of protection under microclimate conditions declared by the manufacturer. | expand abbreviation. |
| **non-firmware element** | hardware, software, code, components, tools, training, technical support, instructions or programming provided for or with the product that are additional elements, features, enhancements, other improvements, or added functionality beyond basic instructions for hardware to function. | (The definition provided includes a figure that is not referenced) |
| **Open circuit voltage under microclimate conditions, *U*ocm** | open circuit voltage of the combination wave generator at the point of connection of the device under test under microclimate conditions declared by the manufacturer. | The term is being used in te definition |
| **operational control** | An organization has operational control if it has the full authority to introduce and implement its operating policies at the operation level. | Add a qualifier to the term. The term is not really defined |
| **Out of band (PLC)** | The frequency range which excludes the PLC operating bandwidth from 150 kHz to 30MHz. | Add a note in the Recommendation, indicating that ITU-R uses the acronym ‘power line telecommunication (PLT) and not PLC. Expand the acronym power line communication for PLC. See as example, Report ITU-R [SM.2269](https://www.itu.int/pub/R-REP-SM.2269-2013)) on PLT. |
| **overwriting** | the process of deliberately and irreversibly deleting or destroying any data stored in memory on a device to render it unrecoverable⁠. |  |
| **PLC operating bandwidth** | Spectral bandwidth  *B*  , Hz  f  Amplitude   |  | | --- | | The spectral width (B in Hertz) which is defined by the length of the interval where all the PLC operating frequency lines are less than 20 dB below the maximum spectral line (see Figure 2).  Spectral bandwidth  *B*  , Hz  f  Amplitude | |  |
| **primary energy** | Primary energy is the energy embodied in natural resources prior to undergoing any human-made conversions or transformations. | ‘Primary energy’ is not necessary, as it repeats the term. |
| **Product operator** | any actor that can transform and supply modified products and therefore can supply the information a DPP conveys about them, as a result of manufacture or other operations. NOTE – These other operations could be: packaging, configuration, maintenance, repair, upgrade, refurbishment, remanufacturing, or recycling. | Expand abbreviation.  NOTE 1 should go as note in this Recommendation. |
| **QRxLevMin** | The minimum access level of the cell, in dBm |  |
| **Reference Signal (RS)** | The signal, which is transmitted by a victim base station, includes the identification of the base station. Note 1 is characterized by the transmission frequency, transmission frame number and selected random sequence.  NOTE 2: When the aggressor received the signal, the identification of the victim base station can be known, and the mutual interference relationship will be established | The 'includes' is not really part of the definition.  NOTES 1 and 2 should go as notes in this Recommendation. |
| **Resource Optimization** | Resource optimization refers to the process of optimizing the combination of multiple distributed energy resources for a virtual power plant. Resources are allocated and dispatched to maximize the overall performance and economic efficiency of the virtual power plant by taking into account the capacity, cost, reliability, and market conditions of each resource. | Reduce to one sentence + notes |
| **responsible entity** | entity employing the responsible person. |  |
| **responsible person** | the person or entity responsible for Data Sanitisation on a Server or Data Storage Product. |  |
| **secondary energy** | Secondary energy is energy which has been refined from primary energy in an energy conversion process to a more convenient form of energy, such as electricity, refined or synthetic fuels (e.g., gasoline and hydrogen fuel). | ‘Secondary energy is’ is not necessary, as it repeats the term.  Move the examples to a note |
| **Station Scheduling Optimization** | The Station Scheduling Optimization capability refers to its ability to efficiently schedule and optimize individual energy stations within a virtual power plant. Virtual power plant station scheduling optimization takes into account factors such as energy station capacity, cost, efficiency, and reliability to achieve the optimal allocation of energy production and use. | ‘The Station Scheduling Optimization’ is not necessary, as it repeats the term.  Not really a definition |
| **Supply chain due diligence** | the obligations of the economic operator which places a product on the market, in relation to its management system, risk management, third-party verifications by notified bodies and disclosure of information to identify and address actual and potential risks linked to the sourcing, processing and trading of the raw materials required for product manufacturing. Adapted from [b-EC2020]. |  |
| **surge protective device module, SPDM** | SPD that is installed on the PCB of equipment by an appropriated mounting method, such as soldering, plugging, etc. Note: although the SPDMs are installed on the PCB in the form of components, the SPDMs are act as the function of SPD including surge attenuation and complete safety features, which are different from SPC | expand abbreviation.  Note should go as note in this Recommendation. |
| **System interfacing capability** | System interfacing capability refers to its ability to interact and collaborate with first-level load aggregators and stations. It includes the ability to transfer data, communicate and exchange information between the virtual power plant system and external systems. | Not really a definition |
| **Territorial emissions** | Carbon dioxide emissions attributed to the country in which they physically occur. |  |
| **threat mitigation** | The preparations made to avoid threat. Note: In this Recommendation, the threat caused by a malfunction due to a vulnerability to high-altitude electromagnetic pulses (HEMP) or high-power electromagnetic (HPEM) emissions, or a lack of confidentiality due to an insufficient electromagnetic emanations security (EMSEC) are treated. The level of the threat mitigation of the equipment can be calculated from the threat level and the vulnerability level. |  |
| **Top Aggressor** | The base stations that cause the most victim base stations and cause the most serious interference when tropospheric radio-duct exists |  |
| **Tropospheric radio-duct interference path** | The path between the aggressor base station and the victim base station |  |
| **UPR10** | The ratio of the emissions caused by 10 years of typical usage of a given instance of ICT equipment, divided by the emissions caused by the production of said equipment. | Expand abbreviation in the term. |
| **Virtual Power Plant (VPP)** | An entity that realizes the cooperative regulation of a large number of adjustable resources such as distributed power generation, energy storage and controllable loads through information and communication technology and dispatch control software, and participates in the power market and grid operation as a special power plant. |  |
| **Virtual Power Plant Management Platform** | The Virtual Power Plant Management Platform is a platform used to manage and monitor distributed energy resources within a virtual power plant. It provides centralized management, scheduling and control functions for energy resources to achieve efficient operation and economy of the virtual power plant. | Retain only the first sentence (without repeating the term) |
| **vulnerability** | The possibility that the equipment is influenced and does not function correctly Note – In this Recommendation the term is used when equipment is exposed to HEMP or HPEM | Maybe specify what causes the influence?  Note should go as note in this Recommendation. |