



## Interpretation of “internet-connected radio equipment” under the Radio Equipment Directive (RED)

### Disclaimer

This guidance document should assist in the interpretation of the requirements for placing radio equipment (under Directive 2014/53/EU) on the market. This document is publicly available but not binding in the sense of a legal act adopted by any of the EU institutions. In the case of inconsistency between the provisions of the Directive and this guidance document sheet, the provisions of the Directive prevail.

### Cybersecurity under the RED

Delegated Regulation (EU) 2022/30 (‘RED Delegated Regulation’) was published in the Official Journal of the EU on 12<sup>th</sup> January 2022. It activates (renders applicable) Articles 3(3) (d), (e) and (f) of the Directive 2014/53/EU for certain categories of radio equipment, to reduce cybersecurity risks. The RED Delegated Regulation applies to radio equipment under its scope placed on the market since August 1, 2025. The term ‘placing on the market’ is clarified in section 2 of the Blue Guide on the implementation of the product rules 2022<sup>1</sup>. The concept of placing on the market (making available for the first time on the EU market) refers to each individual product, not to a type/model of product.

This guidance document aims to support a better understanding of the term “internet-connected radio equipment” as defined in the Delegated Regulation. It deals only with this specific topic and needs to be read together with the Commission guidance documents, such as the RED Guide<sup>2</sup> and the Blue Guide<sup>1</sup>.

### Non-exhaustive list of graphical examples as guidance to assess radio equipment as “internet-connected radio equipment”

The following illustrations aim to assist in the assessment of whether a radio equipment qualifies as “internet-connected radio equipment” or not. These illustrations do not intend to provide absolute conclusions, as it remains under the responsibility of the manufacturer to assess their radio equipment on a case-by-case basis. Instead, these illustrations aim to guide towards an alignment in the assessment of products placed on the market.

Furthermore, it should be noted that the approach to analysis in this annex is technology neutral. This annex does not intend to indicate whether one specific technology is affected by the delegated regulation or not. The following examples solely focus on providing clarifications for the term “internet-connected radio equipment”, which is key for the application of the Delegated Regulation (EU) 2022/30. **Reference to specific technologies in this annex have only been added for illustrative purposes.**

Although both Regulation (EU) 2024/2847 (Cyber Resilience Act) and Commission Delegated Regulation (EU) 2022/30 lay down cybersecurity-related regulatory requirements, their respective scopes and objectives differ. Regulation (EU) 2024/2847 establishes a horizontal and comprehensive legal framework applicable to all products with digital elements placed on the Union market, irrespective of the sector concerned. By contrast, Delegated Regulation (EU) 2022/30 supplements

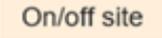
<sup>1</sup> [Blue Guide](#) on the implementation of the product rules 2022

<sup>2</sup> [RED Guide](#). This document is intended to be integrated in the RED Guide (when it is updated).

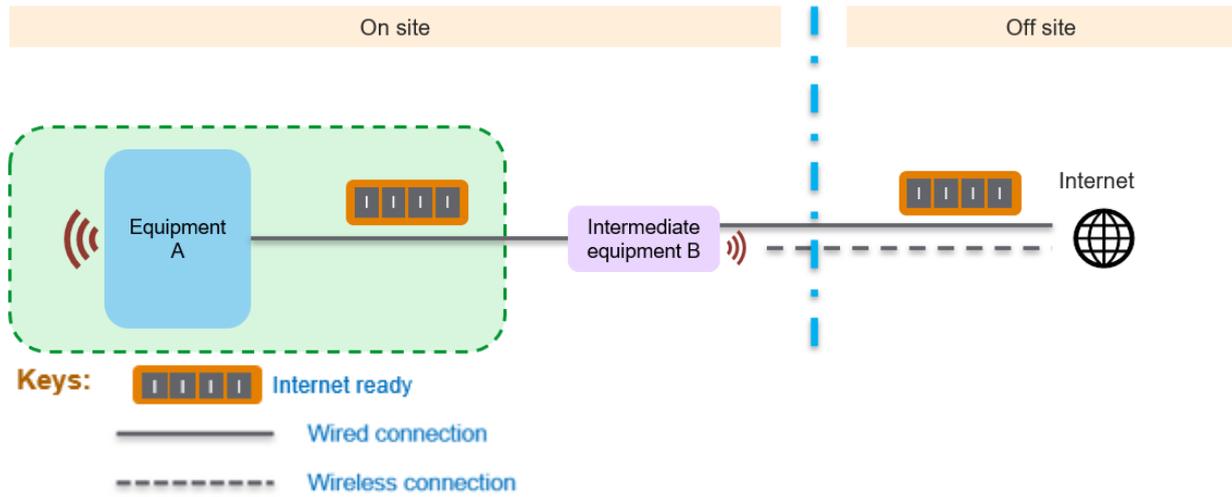
EU Directive 2014/53 (Radio Equipment Directive) by introducing cybersecurity requirements that are limited to specific categories and classes of radio equipment.

**Accordingly, this document does not address the Cyber Resilience Act, but focuses exclusively on the analysis of one category of radio equipment covered by Delegated Regulation (EU) 2022/30, namely “internet-connected radio equipment”.**

### Keys for illustrations

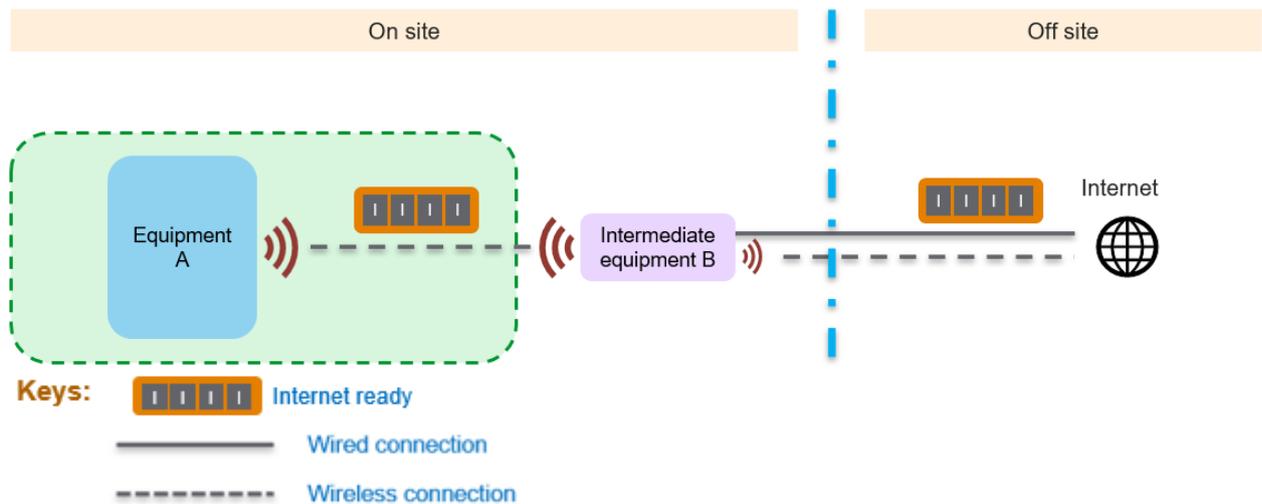
	Assessment perimeter – non-Internet connected radio equipment
	Assessment perimeter – Internet connected radio equipment
	Radio functionality
	Wired connection
	Wireless connection
	Internet
	Internet ready: any protocol that allows Internet communication
	Non-Internet ready: a protocol that doesn't allow Internet communication
	Area of use of the equipment (informative)

**Case 1**



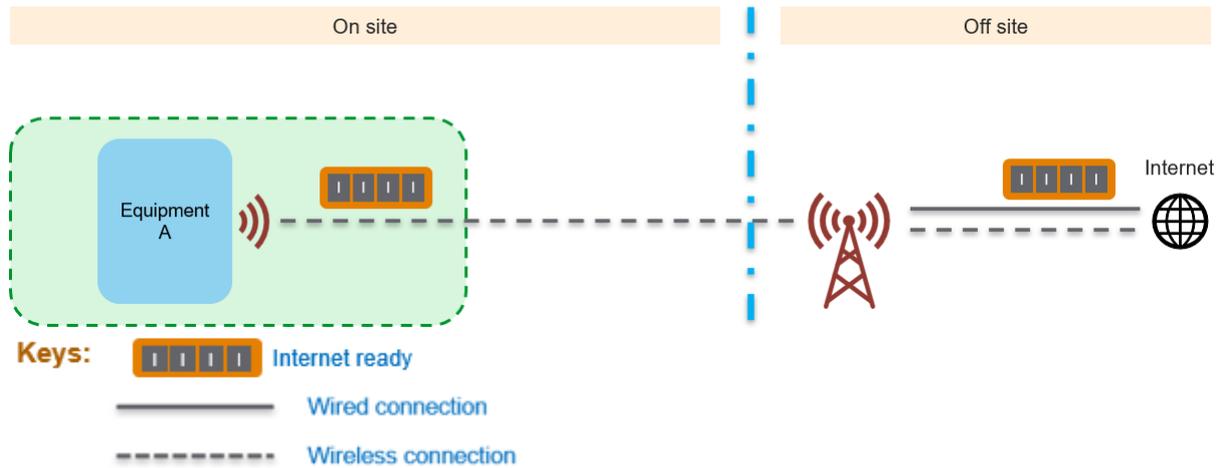
<b>Equipment A</b>	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30)	Yes. The equipment operates a protocol (open or proprietary) that allows communication over the internet via wired connection via intermediate equipment (indirectly connected).

**Case 2**



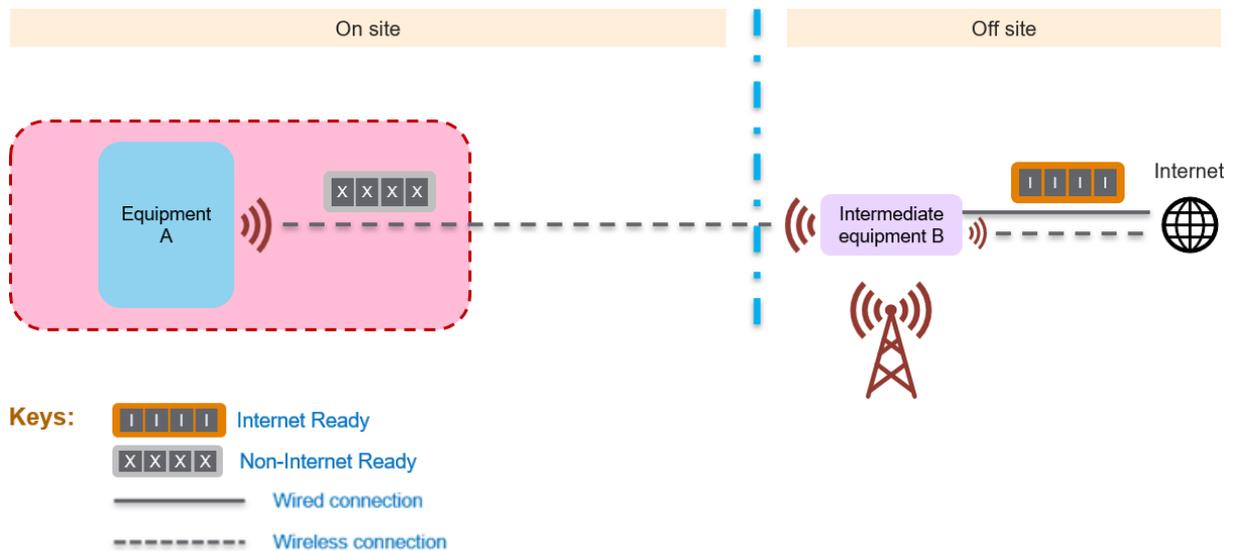
<b>Equipment A</b>	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30)	Yes. The equipment operates a protocol (open or proprietary) that allows communication over the internet via intermediate equipment (indirectly connected).
Illustrative examples	Wireless Hotel door lock system using NFC, Smart TV set using Wi-Fi, smart tablet PC using Wi-Fi

### Case 3



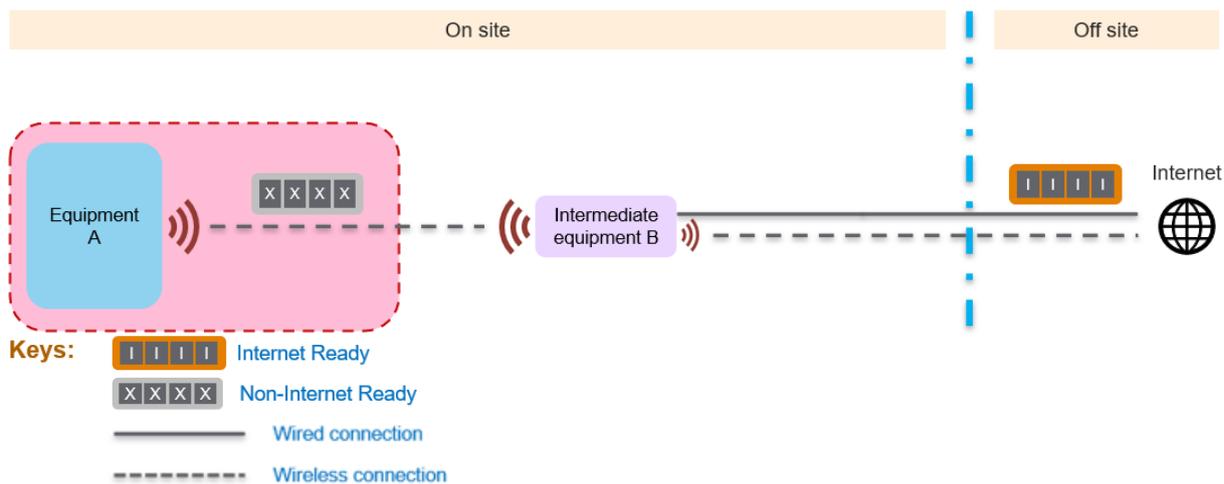
Equipment A	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	Yes. The equipment operates a protocol (open or proprietary) that allows communication over the internet (directly connected).
Illustrative examples	Smart tablet PC using 4G, smartphone using 5G

### Case 4



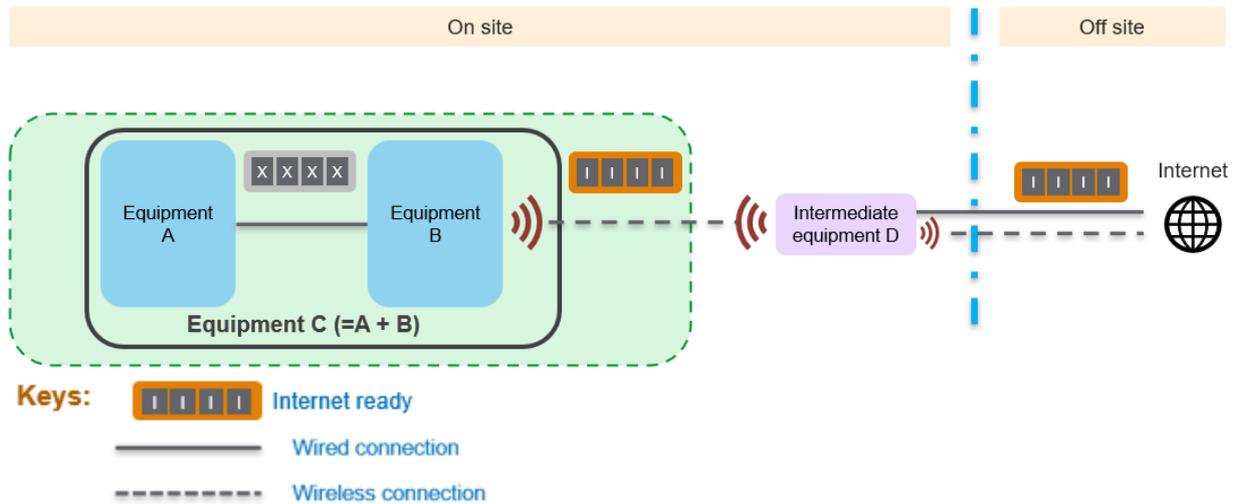
Equipment A	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	No. The equipment does not operate a protocol (open or proprietary) that allows communication over the internet.  In this case the risk assessment performed by the manufacturer shall determine if the radio equipment is not capable to communicate with the internet or be accessed from the internet.
Illustrative examples	Asset tracking using Sigfox, temperature sensor using LoRaWAN.

**Case 5**



<b>Equipment A</b>	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	No. The equipment does not operate a protocol (open or proprietary) that allows communication over the internet. In this case the risk assessment performed by the manufacturer shall determine if the radio equipment is not capable to communicate with the internet or be accessed from the internet.
Illustrative examples	Standalone door lock using NFC, standalone light bulb using Zigbee, wireless headphones using Bluetooth

**Case 6**



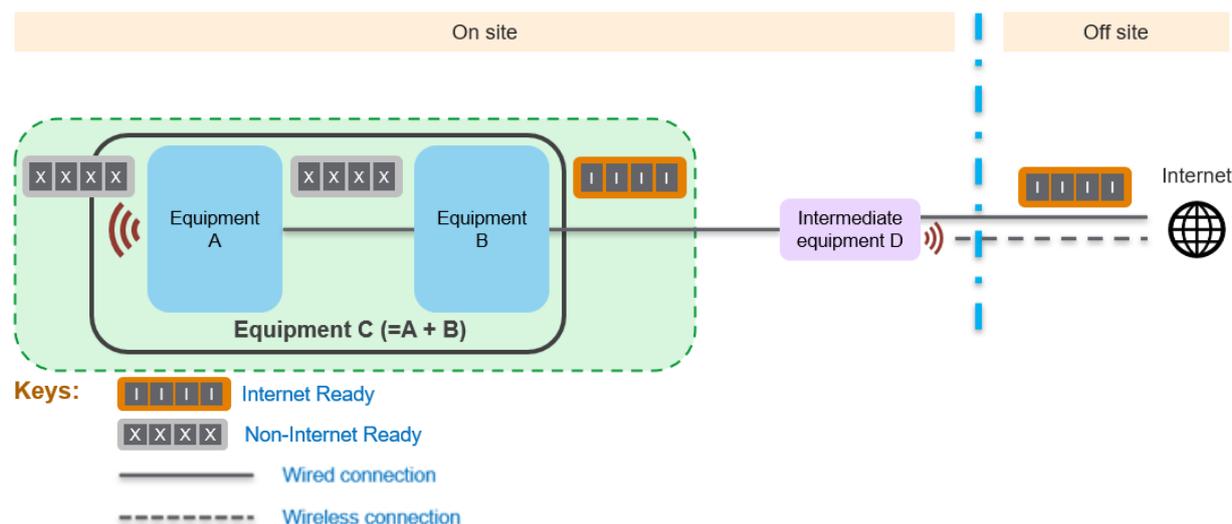
<b>Equipment A</b>	
Is it radio equipment falling under the scope of the RED?	No. The equipment has no radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	This is irrelevant since Equipment A is not radio equipment within the RED.
Illustrative example	Washing machine, refrigerator, coffee machine, loudspeaker (without radio functionality)

<b>Equipment B</b>	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	Yes. The equipment operates a protocol (open or proprietary) that allows communication over the internet via intermediate equipment (indirectly connected).
Illustrative example	Wi-Fi module

<b>Equipment C<sup>3</sup></b>	
Is it radio equipment falling under the scope of the RED?	Yes. The combined equipment <sup>3</sup> has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	Yes. The combination of equipment A and equipment B makes equipment C, internet-connected radio equipment. See Case#2
Illustrative example	Smart washing machine, smart refrigerator, smart coffee machine, smart loudspeaker.

<sup>3</sup> Equipment C is a combined equipment (combination of radio and non-radio equipment) according to [Supplementary Guidance on the LVD/EMCD/RED](#)

## Case 7



<b>Equipment A</b>	
Is it radio equipment falling under the scope of the RED?	Yes. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	No. The equipment does not operate a protocol (open or proprietary) that allows communication over the internet.
Illustrative example	NFC module

<b>Equipment B</b>	
Is it radio equipment falling under the scope of the RED?	No. The equipment has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	This is irrelevant since Equipment B is not radio equipment within the RED.
Illustrative example	Washing machine equipped with a LAN port

<b>Equipment C<sup>4</sup></b>	
Is it radio equipment falling under the scope of the RED?	Yes. The combined equipment <sup>4</sup> has radio functionality.
Is it internet-connected radio equipment? (According to article 1 of Delegated Regulation (EU) 2022/30))	Yes. The combination of equipment A and equipment B makes equipment C, internet-connected radio equipment. See Case #1
Illustrative example	Washing machine (equipped with a LAN port) with a NFC module (all RED-Product equipped with a LAN port is in scope with (EU) 2022/30)

<sup>4</sup> Equipment C is a combined equipment (combination of radio and non-radio equipment) according to [Supplementary Guidance on the LVD/EMCD/RED](#)