

Consolidated questions for a correct understanding of the ongoing consultation on the redundancy of emergency services

[Raadpleging over een ontwerp van koninklijk besluit en van technische bijlage betreffende de invoering van het redundantiesysteem voor de nooddiensten | BIPT](#)

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1. Scope & terminology

- 1. Proximus implemented voice recording upon request of Astrid and implemented this in the DRS solution. Is the voice recording solution also part of the DRS solution defined in the draft Royal Decree?***

Answer :

There is no « DRS solution defined in the draft Royal Decree ». However, the draft Technical Annex stipulates that both Designated Operators have the obligation to activate or respond to a request to activate a Disaster Recovery System (DRS) procedure, which consists of redirecting emergency calls in order to bypass the ASTRID systems and sending them to predetermined mobile numbers.

To avoid any misunderstanding, we would like to point out that the draft Technical Annex is not intended to be part of the Royal Decree, but it is a preparatory document drafted in order to serve in the drafting of the technical specifications which will be part of the documents related to the call for tenders.

It is necessary to require Designated Operators to use a DRS system, as described in the draft Technical Annex, in order to achieve the objective set out in the law, namely to ensure uninterrupted access to emergency services (Article 107(3)(2) of the Telecommunications Act). However, the question of who bears these costs can be distinguished from the question of the obligation to use this system.

In the Specific Questions submitted to public consultation, it is asked whether it would be possible to propose an alternative solution to the existing one (used by Proximus), and what would be the scale of the related costs (CAPEX and OPEX).

Following the results of the public consultation, the working group of administrations will agree on a position and recommend to the Minister of Telecommunications whether the costs of the DRS should be borne by the Funds for Emergency Calls.

So far, we understand the question as whether the Designated Operator will have to include, in its DRS system, a solution equivalent to the Voice Recording solution currently

used by Proximus. This service allows the DRS to be activated either by Proximus, ASTRID or the PSAP.

As mentioned in the draft Technical Annex, any proposition for an alternative solution to the existing one is welcome, as long as it achieves the same result and as long as it can be used as a single solution by both Designated Operators. For the avoidance of any doubt, the result to be achieved is: having a system which allows the Designated Operator to activate – by its own initiative or by ASTRID or by the emergency services (the 3 scenarios shall be handled) – a Disaster Recovery System (DRS) procedure, which consists of redirecting emergency calls to bypass the ASTRID systems and sending them to predetermined mobile numbers.

Following the meeting of 18 September with AGORIA's members, the BIPT, ASTRID and the Emergency Services (hereafter the "Meeting of 18 September 2025"), the following specifications are provided regarding the current system.

The current DRS system consists of two steps:

- A procedure per PSAP/province (so 21 in total) to redirect the incoming 100, 101 (including stalking), and 112 calls to an alternative destination (in the current solution, a head number of the VMS system). The activation happens either via:
 - the helpdesk of the provider ;
 - a web interface by the emergency centre or ASTRID.
- VMS is like a cloud contact centre solution:
 - It provides a head number per queue (=PSAP).
 - Calls are distributed to agents, where an agent is a public telephone number (in our case BLM GSM phones).
 - Agents can login/logout by dialing a phone number, enter a pin code. Alternatively they can be logged in via the supervisor web interface of VMS.
 - The call distribution is a group hunting, searching for the first agent available (round robin). In this way, calls are not presented to agents that are still on a call.
 - The calls that are distributed by VMS are also recorded as soon as they are answered by an agent.
 - There is a web interface to define the agents, change target numbers, timeouts, login/logout, status of agents, etc. The web interface also gives access to recordings.
 - The recordings are uploaded via SFTP to an ASTRID server, in the night following the recording. The file name contains the following: A number, B number and agent, timestamp.

Note: a second group for the non-published numbers has been added to VMS (just another queue) per PSAP.

2. *We understand that the redundancy requirement is also applicable for e-calls. Is the redundancy also applicable for the geographical number used for the stalking application?*

Answer : Yes.

- *Reference is made to non-published numbers for emergency calls with priority. Today these numbers are not official emergency numbers. Is the redundancy requirement in the law applicable for calls to these numbers? Will the list of these numbers be published to allow operators to apply the redundancy requirements?*

Answer :

Article 107/1/1, paragraph 1, of the Telecom Act defines the “redundancy system for emergency calls” as the system enabling in particular the conveyance of emergency calls to emergency services providing on-site assistance via at least two “direct paths”.

The draft Royal Decree and draft technical annex derived from this Article 107/1/1 concern therefore the conveyance of emergency calls to these services, which are defined as follows in Article 107, paragraph 1, a), of the same Act:

*"a. Emergency services providing on-site assistance:
1° the emergency medical service;
2° the fire services;
3° the police services;
4° the civil protection;"*

The draft Technical Annex subject to public consultation mentions the following:

"The redundancy system must be guaranteed for the following emergency numbers, or for any other number that may replace or be added to those listed below, for services providing on-site assistance within the meaning of Article 107, paragraph 1:

- For the fire services and the emergency medical service: the short numbers 112, 100, and for test calls, 119;*
- For the police services: 101 and, for test calls, 117;*
- Non-published numbers for priority emergency calls."*

This last point (“Non-published numbers for priority emergency calls”) causes confusion and will be amended in a corrigendum published on the public consultation website. This point does not aim to add an obligation to ensure priority between users in the routing of emergency calls, but aims to include calls to emergency services offering on-site assistance that are initiated to unpublished numbers defined by law for the use of emergency services. This refers, amongst others, to ministerial decrees issued pursuant to Article 154 of the Act of 2 October 2017 regulating private and specific security, which are published by way of mention in the Belgian Official Gazette for confidentiality reasons. This type of

emergency calls concern only fixed geographical numbers defined by law for the use of emergency services.

3. *Could you provide more details on the definition, purpose, target users, and technical implementation of "Silence Numbers" and "Stalking Numbers"?*

Answer :

The "Stalking Number" is used to immediately switch to calling 101 without having to go through a selection menu first.

"Silence Numbers" are numbers used by the emergency services themselves to contact their colleagues, so the emergency services call their partners directly by means of the long number. Silence numbers used to be treated externally and, consequently, the IVR had to be bypassed. This is no longer the case because Silence Numbers are handled internally, hence this function is not needed anymore.

2. Outage & Penalties

- *If there is an outage/ issue on one of the two designated operator's systems, will the operator affected by the outage face penalties, even if the calling user's emergency call was not impacted due to the efficiency of the redundancy solution in place?*

Answer : This question is related to the public procurement procedure, hence we cannot answer this yet.

3. Emergency Trunks & Capacity

4. *The need for dedicated emergency trunks: In the past we had reserved capacity for emergency calls on the interconnects, should this be re-installed from a risk management perspective?*

Answer :

The Designated Operators must assess for themselves as to whether they think this necessary in order to provide a highly reliable service. If, in the event of an incident, it is determined that reserving emergency call capacity would have prevented the incident, the BIPT reserves the right to remedy this in accordance with the legal procedures.

5. *The number of channels/DDI in the DCA/DCB central PSAP is lower than today's reality. Is this reduction on purpose or is this a mistake? Each direct route should be able to handle the full capacity in case the other routing path is out of service.*

Answer : The following corrigendum will be published on the BIPT's website :

Province	Type of data centre	Number of channels	DDI
ANT 101	local	30	10
ANT 112	local	30	10
BXL 101	local	30	10
BXL 112	local	30	10
BRW 101 ¹	local	30	10
HAI 101	local	30	10
HAI 112	local	30	10
LIE 101/112	local	30	10
LIM 101/112	local	30	10
LUX 101/112	local	30	10
NAM 101/112	local	30	10
OVL 101/112	local	30	10
VBR 101/112	local	30	10
WVL 101/112	local	30	10
DCA 101/112/eCall	central	150 -> 240	200
DCB 101/112/eCall	central	150 -> 240	200
TAS-CDC	local (test centre) ²	10	10
TAS-PDC	local (test centre) ³	10	10

4. Responsibility on design requirements & costs

- *We understand that the technical aspects of the design will be technology specific per operator, but the behaviour of the redirect system will be a shared responsibility. Will design requirements be the responsibility of the operator implementing the system, or should it be a shared responsibility and to what extent? If so, this will create additional costs, so we would like to have some clarity as soon as possible.*

Answer : This question is related to the public procurement procedure, hence we cannot answer this yet.

6. Is the cost of testing included in the costs listed in the Royal Decree article 4?

Answer :

¹ Calls to 112 coming from Walloon Brabant are currently conveyed towards the centre in the province of Hainaut.

² ASTRID uses these data centres to test its own architecture.

³ Idem.

During the call of 29/08, Agoria clarified the question, meaning the cost of the testing mechanism described in the draft Technical Annex.

The tests prescribed by the draft Technical Annex must be distinguished from the tests prescribed by the draft Royal Decree:

- **The draft Royal Decree** imposes on any “large” Operator to execute tests, at the frequency of 1 time per minute, between its own infrastructure and the infrastructure of a Designated Operator, unless in case of load-balancing in accordance with Art. 107/1/1, paragraph 2, subparagraph 2, of the Telecom Act.

This cost could be considered as being « symmetric » for all « large » operators, whether Designated or not. This argument could lead to the conclusion that such cost should be excluded from the categories of costs borne by the Emergency Fund.

- **The draft Technical Annex** imposes on each Designated Operator to execute tests, as specified therein, between its own infrastructure and the PSAPs.

This cost is specifically imposed on each Designated Operator and, hence, should be borne by the Emergency Fund.

These tests will have to be processed in order to ensure the full reliability, at any time, of the redundant path for each Designated Operator. Hence, it seems reasonable to allow the costs related to these tests of the Designated Operators to enter into the category of cost set out under Art 4, 1° of the draft Royal Decree, i.e. « *to the addition of any network element necessary for the proper functioning of the direct path or to ensure high reliability of this direct path, in accordance with best practice.* » (free translation)

These are the types of issues which we intended to tackle with the Specific Questions set forth in the public consultation document. Hence, Agoria and its members are very welcome to provide further comments on this.

A table with the different scenarios and the related testing obligations imposed by the draft Royal Decree and/or the draft Technical Annex is provided hereunder:

	Large operator NOT designated NO own infrastructure to PSAPs	Large operator NOT designated Own infrastructure to PSAPs	Large operator Designated Own infrastructure to PSAPs
Draft Royal Decree Conveyance between the	Obligation to <u>do load-balancing</u> between the 2 “directs paths” of the Designated Operators, in	Obligation to test, once every minute, the proper conveyance of its emergency calls	Obligation to test, once every minute, the proper conveyance of its emergency calls

concerned large operator's infrastructure and the infrastructure of a Designated Operator	accordance with Art. 107/1/1, paragraph 2, subparagraph 2.	through the alternative "direct path" of at least one Designated Operator <u>unless it chooses to do load-balancing</u> in accordance with Art. 107/1/1, paragraph 2, subparagraph 2.	through the alternative "direct path" of the other Designated Operator.
Draft Technical Annex Conveyance between the Designated Operator's infrastructure and the PSAP's	None.	None.	Obligation to test, once every minute, the proper conveyance the emergency calls to each zone's local and central geographic numbers for 101 and 112 calls (in total 44 numbers).

7. Similarly, is the cost of the DRS included in article 4?

Answer: Cf. answer under question 1.

- *Question 14 under the "specific questions" only mentions costs to make the redirect system available. Does this cost also include CAPEX and maintenance costs for the redirect system?*

Answer: No, as these costs (CAPEX and maintenance) are assumed to be "symmetric" for all operators with "extended obligations", whereas the provision of this service to others will be an obligation only upon "designated operators" following the contract award.

5. Threshold & proposal of % of Publicly Assigned Numbers

- *Clarify what is meant by 'publicly assigned numbers'. Does this mean numbers assigned to an individual operator whether they are assigned or not, or numbers being actively used by subscribers (ie an active contract is in place)?*

Answer:

Choosing to use a percentage of the total number of publicly allocated number blocks as a criterion for obliging operators to have a redundancy system is a trade-off between reliability of the data and their accuracy.

As the BIPT is the owner of these data, their reliability is unquestionable. The use of the number of active SIM cards or other similar criteria requires the BIPT to collect data. As regards the number of active SIM cards, inconsistencies have been identified in recent years. This file cannot afford such inconsistencies.

- *Aside from the threshold of publicly assigned numbers, what criteria will BIPT use to determine the candidates?*

Answer: This question is related to the public procurement procedure, hence we cannot answer this yet.

6. Automated Testing

- *Is the purpose of the proposed automated testing to check the reachability (routing of the call) which is mainly checking signaling and/ or the success of a speech path?*
 - o *If we test the reachability of Astrid, no checks on speech paths are involved. If the existence of a speech path is tested by a prompt played at the emergency center premises, it means that the person calling the ES can hear the agent, but there is no proof that the agent can hear the caller*
 - o *Therefore, a speech path test must confirm the existence of a connected speech path in both directions. This test is only beneficial once tested end to end, which implies that this obligation must be imposed on every operator.*

Answer :

Currently, a .wav file of roughly 10 seconds is played from ASTRID to Proximus for each test originating at Proximus. If the robot can clearly understand the file at Proximus, the test is considered successful. After all, it can be assumed that if one path is successful, the other one is as well. On top of that, it is up to ASTRID to consider whether testing that direction is appropriate.

The .wav files will be made available by ASTRID to the Designated Operators.

- *Does this need to be connected to a specific setup/application at Astrid?*

Answer: The same lines are used for the tests as well as for the actual emergency calls. There is consequently no separate testing architecture to be taken into account.

8. *Can it be clarified how many tests per minutes are expected by each operator providing the direct routing path? Is the operator offering a direct routing path requested to test both its own routing path and the alternative routing path? We see reference to tests per province. We see reference to test via numbers 117 and 119.*

Answer:

There are 11 zones, corresponding to the provinces and Brussels. Each zone has a local and central geographic number for numbers 101 and 112. This, consequently, totals to (11 zones x 2 services x 2 numbers/service=) 44 numbers.

Each of these numbers should be tested every minute. The BIPT realises that Chapter f. of the public consultation does not correspond to this set-up. A corrigendum will be published.

We refer to the table above on the different testing obligations for more details.

9. *The document mentions a "specific and unique" sound for automated tests. Could you specify the characteristics of this sound? Is it metadata, a specific frequency in the RTP stream, or a human-readable sentence?*

Answer: See first question, Chapter 6.

- *Does the test robot need to navigate through the IVR, or is the test considered successful once the IVR is reached?*

Answer: A test is performed to reach the IVR. The test itself does not have to navigate through it.

10. *The current notification method to the IBPT on-call service is via automated voice message. Is this method sufficiently reliable, or should there be a backup notification (e.g., by email)? Similarly, for notifications to ASTRID, would a backup email notification be appropriate?*

Answer:

Indeed, an automated voice message is insufficient in itself. ASTRID and the BIPT welcome the idea of sending an automatic email in addition to the automated voice message.

Aside from the automated voice message and email, the incident manager of the operator concerned must still contact the BIPT by telephone in accordance with the procedures already agreed.

7. Unclarities on technical specifications in the technical annex

- *Inconsistencies between point c. on IVR and point d. on number translation system...*
 - o *Point c. states that the IVR must deliver emergency calls to "call centers" using the format "C0992-EME-ZIPC."*

Answer:

This had not been formulated correctly. For that line, 2)c. needs to be modified to:

"Every designated operator must set up an Interactive Voice Response (IVR) server that meets the following terms.

Incoming emergency calls are delivered to the designated operator in the following format: "C0992-EME-ZIPC""

- *Point d. requires operators to implement a translation system from "short numbers" (could you specify which numbers are included—only 100/101/112, or others as well?) to "long numbers" (we assume these are geographical numbers) for routing calls to the PSAP.*

Answer: Numbers 117 and 119 must also be translated. The Stalking Number, which is a long number, must also be translated to send it to the correct PSAP.

- **Are "call centers" and "PSAP" referring to the same entity? If not, please clarify the distinction and the rationale for different formats.**

Answer : "call centres" is a generic term, referring to all PSAPs. Basically, it refers to the same entities.

- ***Questions in point d. on number translation system***

- *Regarding IVR exclusions: Do the exceptions apply to the calling number, the destination number, or both?*

Answer: The caller can bypass the IVR in several ways, such as through the BE 112 application or international numbers, which are outgoing calls. The Stalking Number, which is a destination, should also bypass the IVR.

- *If the exception is based on the calling number, does this require an API call for every incoming emergency call to the IVR? If so, where is this API call described in "Annexe 3.B"? If not, how frequently should this API call be made?*

Answer : The API is described in the [AppChoice-Design.pdf](#) shared with you.

- ***Questions on annex 3B. on the IVR Call Flow and Interfaces***

- *We request a more detailed description of the IVR call flow, including the main checks performed and a description of the SOAP interface.*

Answer: See previous question.

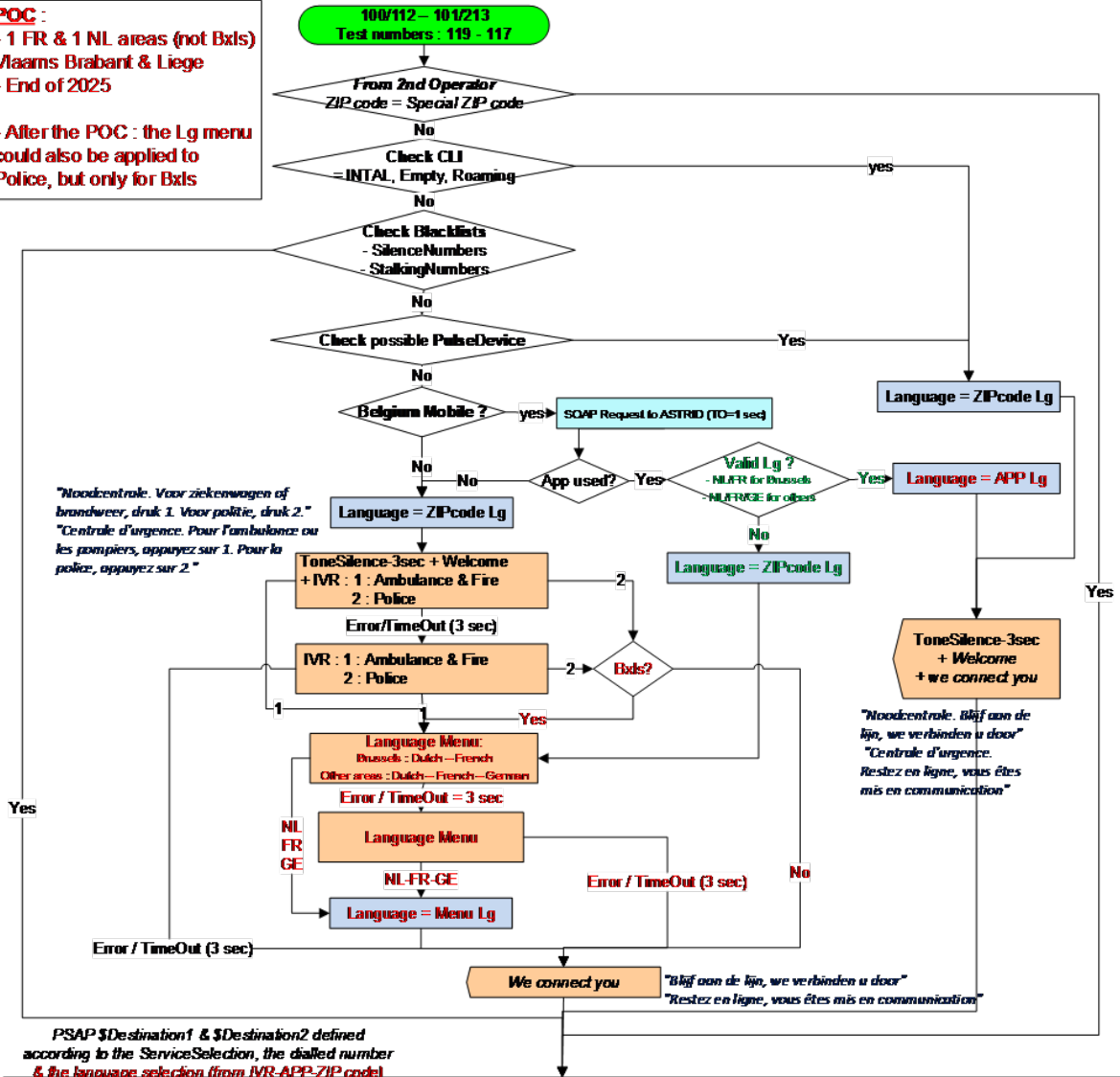
- *Please clarify what the "Check possible PulseDevice" step entails and what is required for this check.*

Answer: This step can be disregarded. Alternative operators generally no longer support pulse dialing.

- *Astrid should deliver an updated IVR flow as this is not the latest version*

Answer: Cf. below.

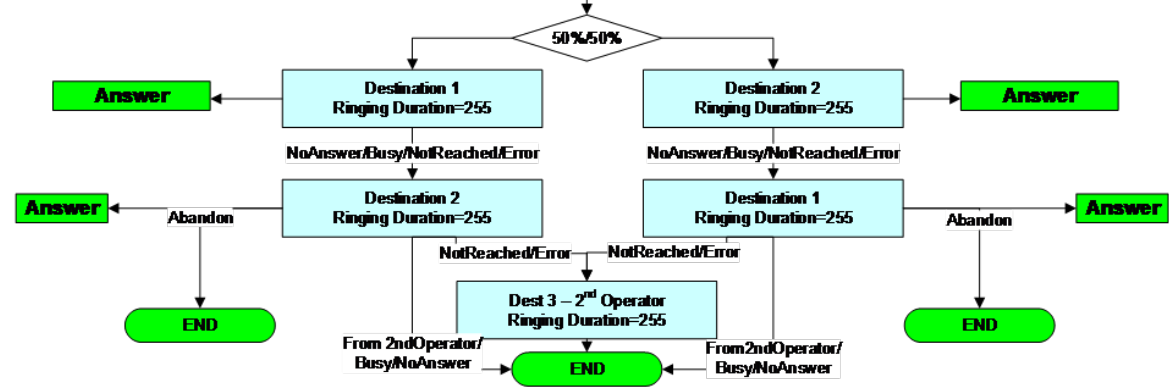
POC :
 - 1 FR & 1 NL areas (not BxIs)
 Vlaams Brabant & Liege
 - End of 2025
 - After the POC : the Lg menu
 could also be applied to
 Police, but only for BxIs



PSAP \$Destination1 & \$Destination2 defined according to the ServiceSelection, the dialled number & the language selection (from IVR-APP-ZIP code)

Current Emergency Centers
 based on ZIP code and per ServiceNumbers (112/100/119 & 101/213/117)
For Ambulance/Fire, excepted BxIs :
 In case of APP-Lg or Menu-Lg ⇔ ZIP-Lg, then new destinations are foresee** excepted for 117/119 ServiceNumber & Telcel destination.
 ** New dest. based on the APP or Menu Language : 112GE - 112FR - 112NL
For Brussels (Ambulance/Fire or Police) : ZIP (native) language is Bilingual.
 In case of Valid APP-Lg or Menu-Lg (FR or NL), new dest is used : 112BxIsNL - 112BxIsFR - 101BxIsFR - 101BxIsNL

*In case of unknown ZIP code (UDOC) :
 GE-FR-NL new areas will be used
 (and not BxIs FR/NL)*



- *Question on Annex 3.A. : The format of the CDR as described here is a Proximus internal CDR format and not the CDR format that is sent to Astrid, so Astrid should give BIPT the CDR format they receive currently from Proximus*

Answer: The description provided is the best description we could find of the CDRs and matches the CDR format that is sent to IBZ and FEDPOL (the CDRs are not sent to ASTRID).