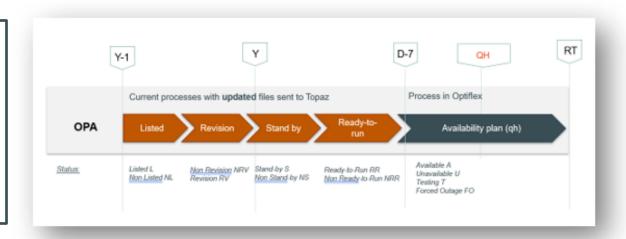


Target design

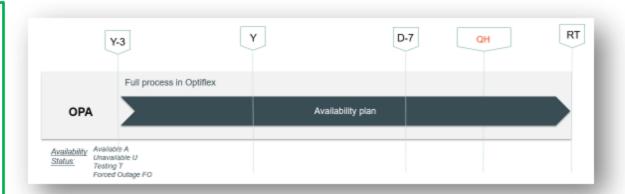
AS IS: current process since iCAROS phase 1 go-live

- Mix between
 - Process with gates and excels files [Y-1 -> W-1]
 - Event based process supported by modern B2B
 and B2C exchange [W-1 -> ID]



TO BE: Target design

- Simplified and uniform process to provide availability plans to Elia
 - Removing several "gates" [SB/RTR] to provide information and introducing continuous updates of data





No major structural change

To implement the management of the long-term availability planning via the new exchange, the approach foreseen by Elia aims at building on the foundation set in phase 1 of the project and limiting the impact in terms of development on Outage Planning Agents.

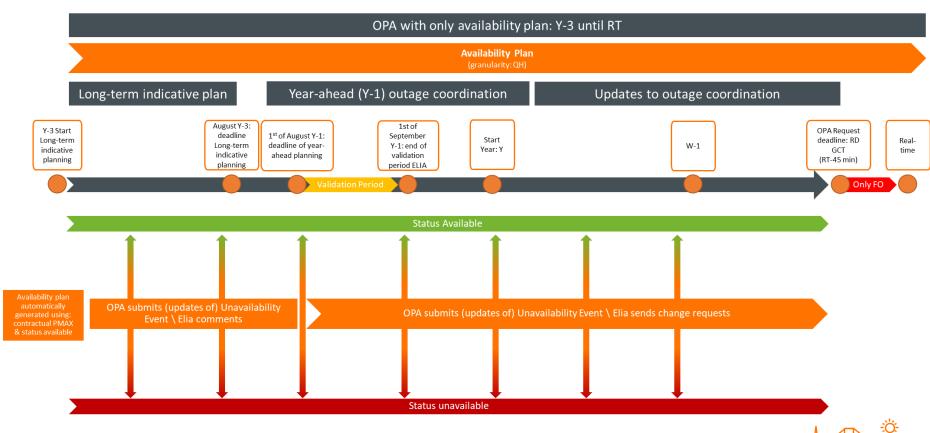
The details of the implementation will be described more in-depth in the upcoming version of the technical guide

- Communication requirements for OPA: existing communication channels will remain unchanged
 - External Communication Layer (B2B) to be used for the exchange of asynchronous messages between Elia and Market Parties;
 - Webclient (B2C) to upload data manually using an Excel template and offer a view on the status of (automatically or manually) sent data via the user interface;
- **External communication**: the existing connection information, queues & exchanges naming convention, message structure, properties, ways to send and receive messages remain unchanged
- **Unavailability event message specifications**: json format and date format, market document structure, identification and versioning remain unchanged
- Acknowledgement and answer messages remain unchanged
- Notification messages remain unchanged



Message timeframe

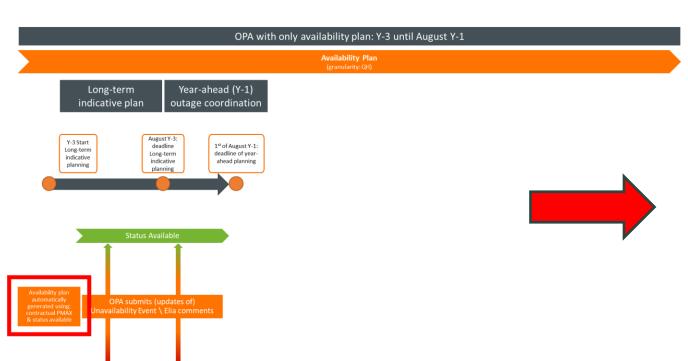
In iCAROS phase 2, the message timeframe will be completely reviewed to offer a simplified and continuous process and remove the time-based approached (gates) applied in the old exchange:





Message timeframe – Indicative Availability Plan generation

In phase 2 of iCAROS, at the beginning of each year the initial Indicative Availability Plan will automatically be constructed for Y+3 using the contractual PMAX and setting the default availability status to "Available". The availability plan will be updated from then onwards based on unavailability events that indicate a (partial) unavailability due to a test event, a Planned or a Forced Outage.



Status unavailable

EXAMPLE: Indicative Availability Plan generation

Situation before 1st Jan Y-3

	Y+2				Y+3											
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DP 1	AV	AV	AV	AV												
DP 2	AV	NA														

Situation after 1st Jan Y-3

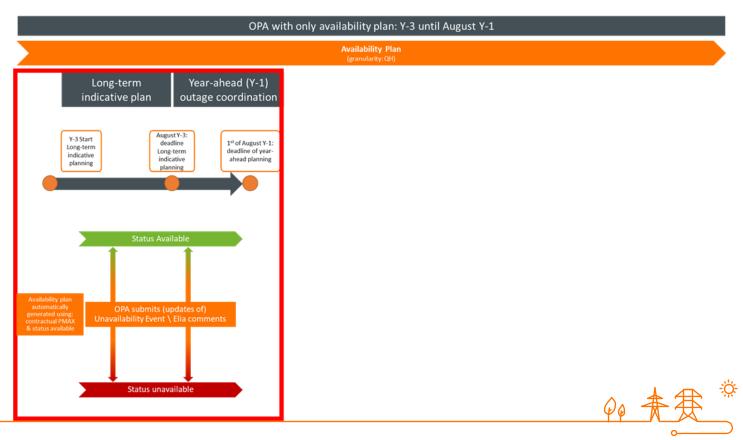
	Y+2				Y+3											
	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
DP 1	AV	ΑV	AV	AV	ΑV	ΑV	AV	ΑV	AV	AV	ΑV	AV	ΑV	ΑV	AV	AV
DP 2	AV	NA	AV	AV	ΑV	AV	ΑV	ΑV	AV	AV						



Message timeframe – Indicative Availability Plan updates (from Y-3 until 1st August Y-1)

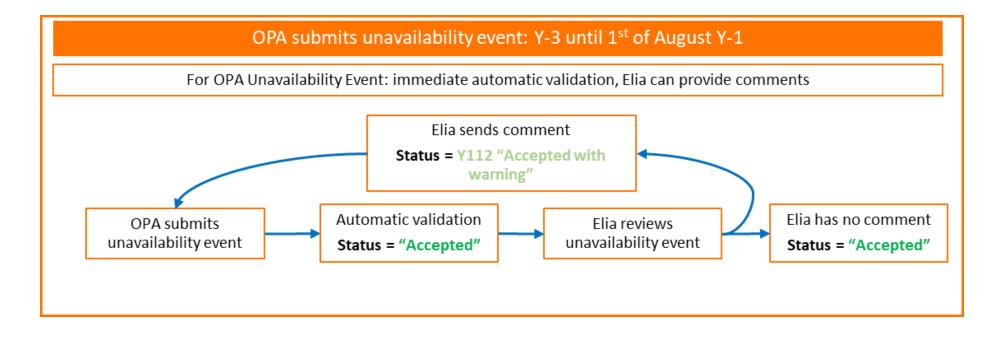
Once availability plans are generated, the system will allow updates of the availability plan.

Before the 1st of August Y-1 the OPA can submit changes as preferred, the unavailability events will be subject to automated validation and automatically accepted if it respects the technical validation rules. ELIA only gives comments.



Message timeframe – Indicative Availability Plan updates (from Y-3 until 1st August Y-1)

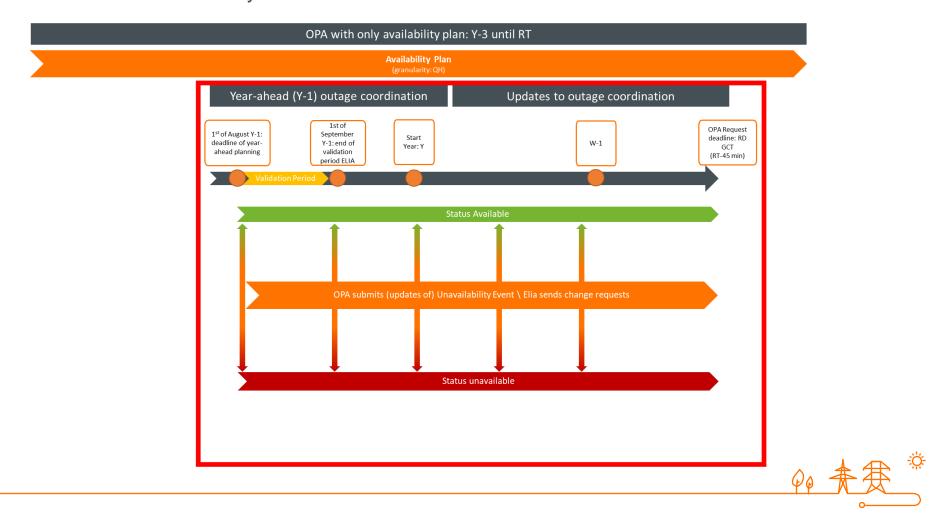
If Elia submits a comment on an unavailability event, the status of the unavailability event will be updated from "Accepted" to "Accepted with warning":





Message timeframe – Availability Plan updates (from1st August Y-1 until RD GCT -45 min)

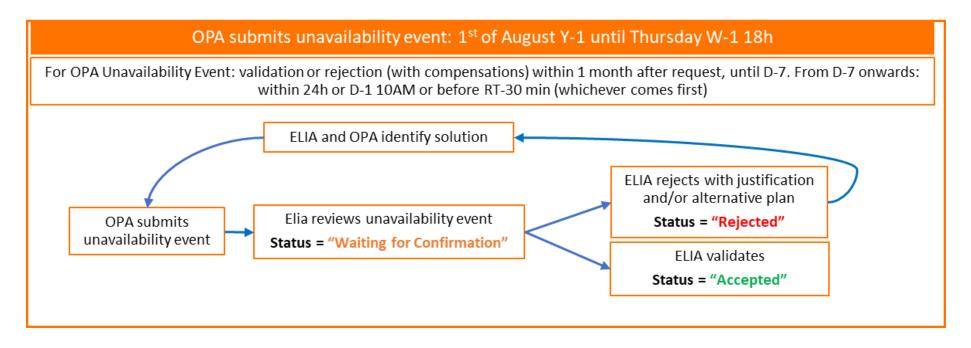
Between 1st of August Y-1 and RD GCT (RT-45 minutes), OPA can submit unavailability events that will be subject to manual validation by Elia:



Message timeframe – Availability Plan updates (from1st August Y-1 until RD GCT -45 min)

Unavailability events are left in status "Waiting For Confirmation" until Elia's acception or rejection.

In case of rejection, Elia will provide a justification as well as a comment providing further information on the rejection's reason and/or a proposal alternative if incompatibilities occur in the reason code's text of the TimeSeries:





Message timeframe – Message resolution and performances

To support the management of longer unavailabilities, additional available_period resolution will be added to the technical guide and rules will be added to preserve optimal performances of the systems: a maximum of 120 timeIntervals will be allowed for each available_period:

Resolution		Period Maximum
Minute based	PT1M	2 hours
15 minutes based	PT15M	30 hours
Hourly	PT1H	5Days
Daily	PT1D	120 Days
Monthly	PT1Mo	5 years (cfr validation rules)



	Event ID	Event duration	Message	20 6	als per per	iods in the	message
	Eventio	Event duration	PT1MO	PT1D	PT1H	PT15M	PT1M
	UE01	1 year, 20 days, 6hrs, 34 minutes	12	20	6	2	4
	UE02	3 months, 2hrs	3 or	90			
UI	UEUZ	3 HIOTILIS, 21115			2 or	4 or	120



Message timeframe – Unavailability Event reason

For Elia's security analysis and transparency purposes, Outage Planning Agents will have to provide complementary information in the Unavailability Event's reason for all types of unavailability events (Planned unavailability, Testing and Forced Outage):

Reason		
Field	Mandatory	Description
code	Y	The code that represents the reason
		A95 = Complementary information (additional information on the unavailability)
text	Υ	Code allows free text



Message timeframe – Validation rules

To support the management of longer unavailabilities and the changes observed in the message timeframe, validation rules will have to be updated accordingly (impacted validation rules highlighted in table below:

ID	Validation Rule	Reply Status	Reason Code	Level
OPL_001	Planned unavailabilities start dates shouldn't be set in the	Reject	Y112	MarketDocument
	past nor after Y+3			
OPL_002	The unavailability end date should lie between current day	Reject	Y40	MarketDocument
	and current Y+5			
OPL_003	The unavailability period of the MarketDocument must be	Reject	Y39	MarketDocument
	the same as the period of the unavailability event			
OPL_004	The Delivery Point must be included in an OPA contract	Reject	Y76	Timeseries
	valid for the availability period for this Outage Planning			
	Agent			
OPL_005	Active unavailability event periods cannot overlap across	Reject	Y38	MarketDocument
	Market Documents			
OPL_006	Planned unavailabilities need manual verification when	Waiting for confirmation followed	Y37	Timeseries
	submitted after 1 st August for Y+1 process	by accept or reject message		
OPL_007	The maximum available capacity should always be	Reject	Y107	MarketDocument
	expressed in absolute values			
OPL_008	The unavailability start date should fall between D-1 and	Reject	Y109	MarketDocument
	next QH after real time for new forced outages			
OPL_009	The updated start date of a forced outage should lie on the	Reject	Y108	MarketDocument
	same day than the start date of the original forced outage			



Message timeframe – Validation rules

To support the management of longer unavailabilities and the changes observed in the message timeframe, validation rules will have to be updated accordingly (impacted validation rules highlighted in table below:

ID	Validation Rule	Reply Status	Reason Code	Level
OPL_010	Forced outage updates need manual verification when updated end date lies before current end date	Waiting for confirmation followed by accept or reject message	Y110	MarketDocument
OPL_011	Planned unavailability has a negative impact on adequacy	Reject	Y113	Timeseries
OPL_012	Planned unavailability has a negative impact on operational security due to a planned outage on an Elia grid asset	Reject	Y114	Timeseries
OPL_013	Planned unavailability has a negative impact on the availability of ancillary services	Reject	Y115	Timeseries
OPL_014	Warning sent by Elia to the Market Party to request a change on an auto-accepted unavailability event that was submitted before 1st August Y-1	Accept with warnings	Y112	Timeseries
OPL_015	Exceeded amount of timeInterval per availability period (120)	Reject	Y116	Timeseries
OPL_016	Missing unavailability event's reason	Reject	Y117	Timeseries
OPL_017	Unavailability events in status "Testing" must be submitted 1 month prior the start date of the unavailability event	Waiting for confirmation followed by accept or reject message	Y118	Timeseries



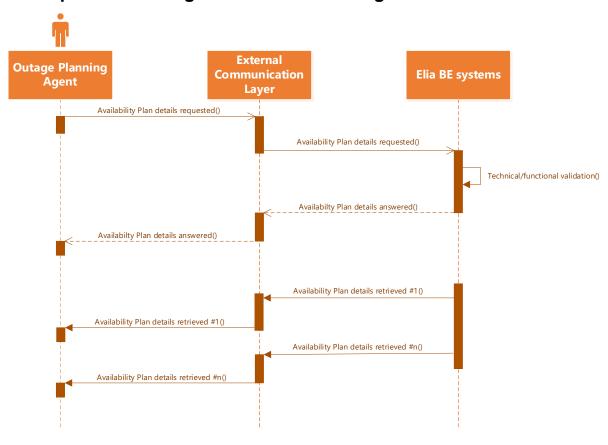
Message timeframe – Retrieving methods

New methods will be foreseen for Outage Planning Agent to retrieve:

- Availability plans
- Unavailability events

Details of the methods will be described in the updated Technical Guide.

Example of retrieving method data exchanges:





Message timeframe – Expectations from OPAs at golive

Situation at the Go live:

- Initial Indicative Availability Plan will be automatically constructed by Elia for the current year, Y+1, Y+2 and Y+3 using the contractual PMAX and setting the default availability status to "Available";
- Unavailability event previously submitted via the new exchange and that are still ongoing will always prevail (situation DP2 in the below example);

Situation before Golive:

	Curi	ent	year										Y+1										YΗ	-2										Y+3									
	Jan	Fel	b Ma	r Ap	r Ma	y Ju	n Jul	Au	g Sep) Oc	t No	o De	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct Nov	Dec Ja	n Fel	Mar	Apr Ma	y Jui	n Jul	Aug	Sep	Oct	Nov	Dec	Jan Fe	eb N	Лаг Ар	r Ma	y Jun	Jul A	Aug S	бер О	ct N	ov De
DP 1																																											
DP 2	NA	NA	NA	NA																																							

Situation at Golive:

	Curre	ent	year									Υ	/+1											Y+2												Y+3											
	Jan	Fel	Ма	Apr	May	Jun	Jul	Aug S	Sep	Oct	NovI	Dec J	an I	Feb I	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct No	/ Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun .	Jul	Aug S	Sep (Oct I	Nov	Dec
DP 1	AV	AV	AV	AV	AV	AV	ΑV	AV	AV	A۷	AV A	AV A	۱V	AV	AV	ΑV	ΑV	AV	A۷	AV	AV	AV AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	AV	ΑV	ΑV	ΑV	AV	AV	AV	A۷	AV A	AV A	AV /	AV	AV
DP 2	NA	NA	NA	NA	AV	AV	ΑV	AV	AV	A۷	AV A	AV A	۱V	AV	AV	ΑV	ΑV	ΑV	A۷	AV	AV	AV AV	AV	AV	AV	AV	AV	AV	AV	ΑV	AV	AV	AV	AV	AV	ΑV	ΑV	ΑV	AV	AV	AV	A۷	AV A	AV A	AV /	AV	AV

After the Go live:

 Outage Planning Agents will be asked to submit all known unavailabilities that were submitted via the old procedures;

