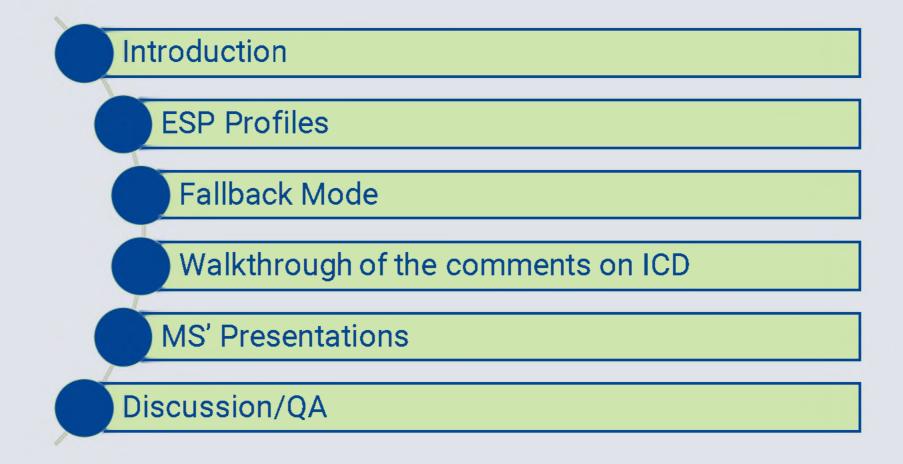


# **Agenda**



# 1 | Introduction

# 2 ESP Profiles

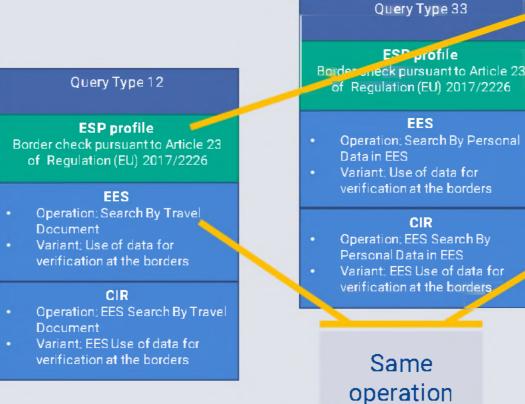
### **Query Type – Introduction of concept**

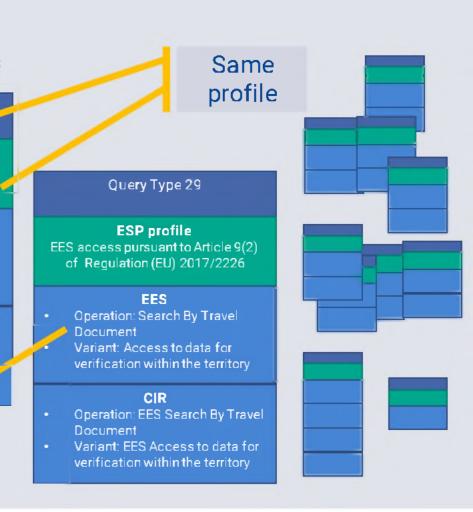
- In order to facilitate the manipulation of the combination of profile/operation/variant the QueryType is introduced.
- Each Query Type represent a specific combination.

You combine profiles by combining query types, you cannot combine multiple query types.

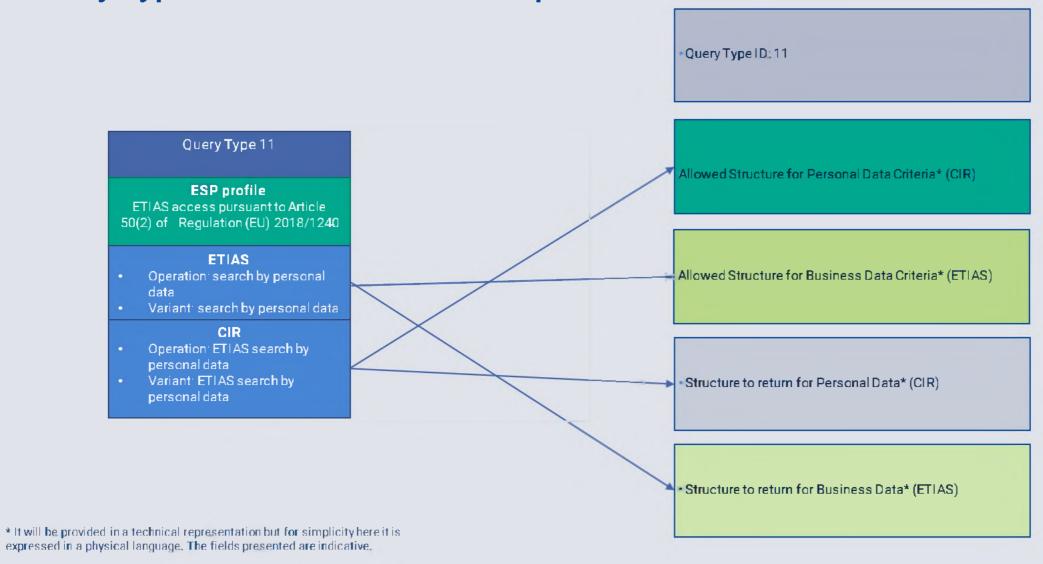
associated to the same profiles

#### Query Type 11 ESP profile ETIAS access pursuant to Article 50(2) of Regulation (EU) 2018/1240 **ETIAS** Operation; search by personal data Variant; search by personal data CIR Operation: ETIAS search by personal data Variant: ETIAS search by personal data





# **Query Type - Introduction of concept**



<sup>\*\*</sup> Details about the ETIAS operations may be found on ETIAS ICD = Annex 4.

# Query Type usage - Non aggregation example

NS performs specific query type without aggregation

ESP Receives the query

ESP Queries System based on the criteria

ESP Returns the Results to NS

Second Chunk

- ESP\_Query(\*)
- Query type =13

#### Personal Data Criteria - {

- Sumame "Surename to search"
- · FirstNames "Firstnameto search"
- · DateOfBirth "10/1/1971"
- PlaceOfBirth = "Buenos Aires"
- · Gender "Male"
- · CurrentNationality "Argentina")

- Validation is performed on the generic structures as defined in ESP External ICD, in case of invalid message returns an error.
- Validation is performed on the personal and business data criterial based on the Query Type definition. In case of invalid message returns an error.
- ESP orchestrates queries in CIR/MID and ETIAS.

- Once ESP has queried all systems having criteria, it has the pool of people satisfying criteria. At this point the first chunk of results can be returned.
- Response Status "Ongoing"
- Query Type = "13"
- Query Type status "Ongoing"

#### · Personal Data Result1-{

- SystemRecordID=1
- Sumame "Sumame to Search"
- : FirstNames = "Firstname to Search"
- · SumameAtBirth "Sumame at Birth"
- DateOfBirth = "10/1/1971"
- PlaceOfBirth = "Buenos Aires"
- CountryOfBirth = "ARG"
- · Gender "Male"
- CurrentNationality = "Argentina"
- · Parent1 FirstNames "Parent1 Name"
- · Parent2FirstNames "Parent 2 Name"
- · Address "An Address 1"
- Contact = "Contact details"
- TravelDocument = "Travel Document details"}

#### · Personal Data Result2-{

- · SystemRecord D-2
- Sumame "Sumame to Search"
- EirstNames = "Eirstname to Search"
- · SumameAtBirth "Sumame at Birth"
- DateOfBirth = "10/1/1971".
- · PlaceOfBirth "Buenos Aires"
- CountryOfBirth = "ARG"
- · Gender "Male"
- CurrentNationality "Argentina"
- · Parent1 FirstNames = "Parent1\_2 Name"
- · Parent2FirstNames "Parent 2\_2 Name"
- · Address "An Address 2"
- . Contact = "Contact details2"
- TravelDocument = "Travel Document details2")

- Response Status = "Completed"
- Query Type "13"
- Query Type status "Completed"
- Business Data Results 1-(
- SystemRecordID=1
- Information SystemID = 3
- Other Nationality = "Brazil")
- Business Data Results 2-4
- SystemRecordID=2.
- Information SystemID = 3
- · Other Nationality "Brazil")

# Query Type usage - Example with aggregation

NS performs specific query type with aggregation

#### ESP Receives the query

#### ESP Queries System based on the criteria

#### ESP Returns the Results to NS

- · FSP Query(\*)
- Query type -13
- Personal Data Criteria {
- · Sumame = "Surename to search"
- FirstNames = "Firstnameto search"
- DateOfBirth = "10/1/1971".
- PlaceOfBirth = "Buenos Aires"
- · Gender "Male"
- · CurrentNationality "Argentina")

- Validation is performed on the generic structures as defined in ESP External ICD. In case of invalid message returns an error.
- Validation is performed on the personal and business data criterial based on the Query Type definition, In case of invalid message returns an error.
- ESP orchestrates queries in CIR/MID and ETIAS.

- Once ESP has queried all systems having criteria it has the pool of people satisfying criteria.
- At this point the first chunk of results can be returned.
- In the given example fusion is enabled so aggregation has been enabled by default.

- · Response Status = "Completed"
- · Query Type "13"
- · Query Type Status "Completed"

#### · Personal Data Result1 - (

- SystemRecordID=1
- InformationSystemID = 2
   Surname = "Surname to Search"
- · FirstNames "Firstname to Search"
- Surname At Birth = "Surname at Birth"
- DateOfBirth = "10/1/1971"
- PlaceOfBirth = "Bijenos Aires"
- CountryOfBirth "ARG"
- · Gender "Male"
- Current Nationality = "Argentina"
- · Parent1 First Names "Parent1 Name"
- · Parent2FirstNames "Parent2 Name"
- · Address = "An Address 1"
- . Contact = "Contact details"
- TravelDocument = "Travel Document details"].

#### · Personal Dala Result2-1

- · SystemRecordID=2
- · InformationSystemID = 2
- Surname = "Surname to Search"
- FirstNames = "Firstname to Search"
- Firstnames Firstname to search
- . SurnameAtBirth = "Surname at Birth"
- DateOfBirth = "10/1/1971"
- · PlaceOfBirth "Buenos Aires"
- · CountryOfBirth = "ARG"
- · Gender "Male"
- CurrentNationa ity = "Argentina"
- · Parent1FirstNames = "Parent1\_2 Name"
- · Parent2FirstNames "Parent2 2 Name"
- · Address = "An Address 2"
- . Contact = "Contact details2"
- TravelDocument = "Travel Document details 2")

#### · Business Data Results 1=(

- · SystemRecordID=1
- InformationSystemID = 3
- Other Nationa ity = "Brazil")
- · Business Data Results 2={
- · SystemRecordID=2
- InformationSystemID = 3
- · Other Nationality "Brazil")

 $<sup>\</sup>mbox{*}$  For this example, the ETIAS operation 'Search by Traveller Data' has been used

# Query Type usage - Example with fusion (implicit aggregation)

#### NS performs specific query type

#### ESP Receives the query

#### ESP Queries System based on the criteria

#### ESP Returns the Results to NS

- · FSP Query(\*)
- Query type -11
  Personal Data Criteria {
- · Surname "Surename to search"
- EirstNames "Eirstnameto search"
- DateOfBirth = "10/1/1971".
- · Gender "Male"
- · Nationality "Argentina"}
- Business Data Criteria (
- Country = "Argentina"
- · City "Buenos Aires"
- PostalCode = "12345"
- AdditionalDataRequested = "TRUE"}

- Validation is performed on the generic structures as defined in ESP External ICD.
   In case of invalid message returns an error,
- Validation is performed on the personal and business data criterial based on the Query Type definition, In case of invalid message returns an error.
- ESP orchestrates queries in CIR/MID and ETIAS.

- Once ESP has queried all systems having criteria it has the pool of people satisfying criteria.
- At this point the first chunk of results can be returned.
- In the given example fusion is enabled so aggregation has been enabled by default

- · Response Status "Completed"
- · Query Type = "11"
- · Query Type Status "Completed"
- · Personal Data Result1-(
- + SystemRecordID=1
- · InformationSystemID = 2

Surname = "Surname to Search"

- · FirstNames = "Firstname to Search"
- SurnameAtBirth = "Surname at Birth"
- DateOfBirth = "10/1/1971"
- · PlaceOfBirth = "Buenos Aires"
- CountryOfBirth = "ARG"
- · Gender "Male"
- Current Nationality = "Argentina"
- · Parenti First Names "Parenti Name"
- · Parent2FirstNames "Parent2 Name"
- TravelDocument = "Travel Document details"]
- · Personal Dala Result2-(
- SystemRecordID=2
- InformationSystemID = 2
   Surname = "Surname to Search"
- \_\_\_\_\_
- · FirstNames = "Firstname to Search"
- SurnameAtBirth = "Surname at Birth"
- · DateOfBirth = "10/1/1971"
- · PlaceOfBirth = "Ruenos Aires"
- · CountryOfBirth "ARG"
- · Gender "Male"
- CurrentNationality = "Argentina"
- · Parent1FirstNames = "Parent1\_2 Name"
- · Parent2FirstNames = "Parent2\_2 Name"
- TravelDocument = "Travel Document details?")
- · Business Data Results 1=(
- SystemRecordID=1
- InformationSystemID = 3
- Occupation "Occupation 1"
- AdditionalQuestions = "Additional Questions 1")
- · Business Data Results 2={
- SystemRecordID=2
- InformationSystemID = 3
- Occupation = "Occupation\_7"
- AdditionalQuestions = "Additional Questions 2"]

# **ESP Profiles – next steps**

- The analysis on the ESP Profiles is ongoing
- While analysis is progressing, new examples/cases will be presented to the MSs
- Once the ESP Profiles are defined, they will be provided to the MSs

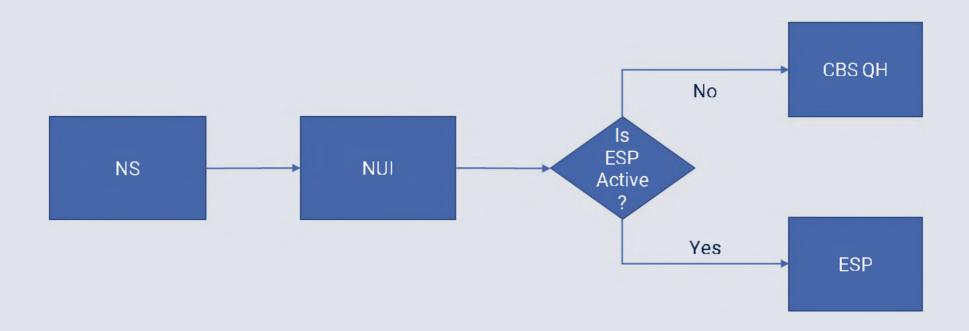
# 3

# ESP Fallback Mode



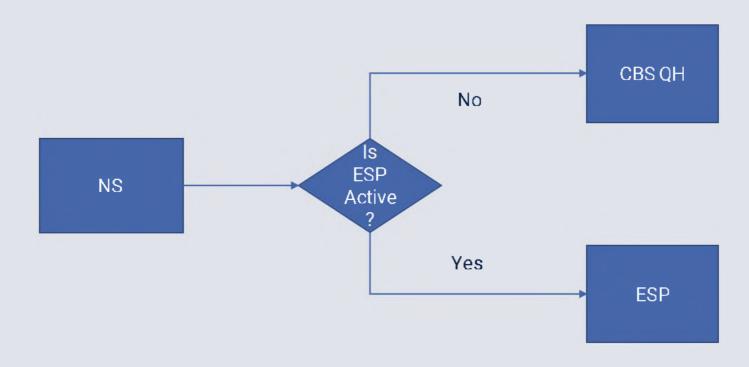
## ESP Normal vs Fallback mode | EES and ETIAS

 The usage of ESP Query Handler (in case of fallback mode) is transparent for the National System



## ESP Normal vs Fallback mode | Other CBS

 Excluding EES and ETIAS, the other CBS clients do not use a NUI and should be adapted for communicating with the ESP



4

MS comments on ESP ICD



# MS Comments on ESP ICD (old versions)

#	MS	Comment	Status	Author's Position
1	FR	Cardinality of SystemQuery = 0*  What does the possible absence of "SystemQUery" mean that this cardinality allows? Does this mean that all CBSs are queried?	To be impl.	Based on discussions with eu-LISA this cardinality will be changed to : 01. and the respective assumption will be added
2	FR	"From our understanding, there are three possible types of queries:- query without merging or aggregation-query with aggregation and fusion Can you confirm this view?"	Rejected	Aggregation can be selected by ESP User, Fusion can not be chosen by ESP User, Fusion is performed on ESP level based on the query parameters and implies aggregation.
3	FR	How does the profile state which business structures of the CBS IO ICDs need to be used for query parameters and return structures?	To be disc.	
4	FR	How does the profile state which attributes of the personal data may be used in the personal data query? Which other restrictions does the profile provide?	To be disc.	
5	FR	How does the profile state which code tables to use for the personal data query parameters?  Which other information relevant for the creation of requests and the interpretation of responses is part of a profile?	To be disc.	
6	FR	Fusion is the action of unifying the scores of a request when the search parameters provided are processed in more than one system. Since fusion requires all the sets of results to have been received by the ESP, to allow for their comparison, it will create a de-facto aggregation of the search results required to be fused. Why is there not a "fusion" field in the QueryRequestHeader to indicate whether there is a homogenisation of scores between CBS, since merge implies agregation but agregation does not imply merge	To be disc.	Indeed fusion implies aggregation, while the aggregation doesn't imply fusion (when using multiple profile, no fusion between the search results provided by each profile will be done). Fusion is done when a profile allow to query different CBSs. When the search parameter are related to the identity or travel document, the search will be done through the CIR and the results will have a score according to this system. Usage of fusion between search results corresponding to different business data search parameters need to be evaluate regarding the business case of the CBSs.
7	FR	Concerning the Query Handler, is it possible to specify the cases in which it can be used? In what specific cases can it be used? Will its use be completely transparent in case of ESP fall back? During the AG EES/ETIAS on 9 November, it was mentioned orally that ECRIS TCN would not be obliged to connect to the ESP and the Query Handler could be used to consult the central system. Could you please clarify this?	To be disc.	Not transparent for non NUI systems, Transparent for EES and ETIAS. ESP Query Handler will be used by ESP User to query ECRIS TCN when ESP is not available.

MS Comments on ESP ICD (v. 02 01 00)

#	MS	Comment	Status	Author's Position
1	DE	The National User can perform the ESP Health Check. Is this a step required to perform before each execution of a query?	To be disc.	Health Check is indeed a step required before each execution of a query.
2	DE	Please provide more information about how to handle and visualise the proto files.	To be disc.	
3	DE	'BusinessDataMatch': Is there a connecting ID between business data and the corresponding personal data? Since there could be more than one match this connection might not be unique.	To be disc.	
4	NL	CIC: was new to me, but is defined in glossary, CIR ICD uses "CBS, excluding SIS", please pick one and use consistently.	To be impl.	To be aligned with CIR ICD.
5	NL	My gRPC knowledge is very limited, but do you really mean "multiple streams of responses" or rather one stream consisting of multiple responses?	To be impl.	Yes, changes to be performed in the document.
6	NL	What does this do? If there is exact one Businessdata per BusinessdataMatch, why introduce the extra level?	Rejected	
7	NL	Search Mode, Scope Modifier -> where will those concepts described ? How they work , when to use ?	To be disc.	

5

MS' Presentations

Discussion/QA

