CAP in Ireland

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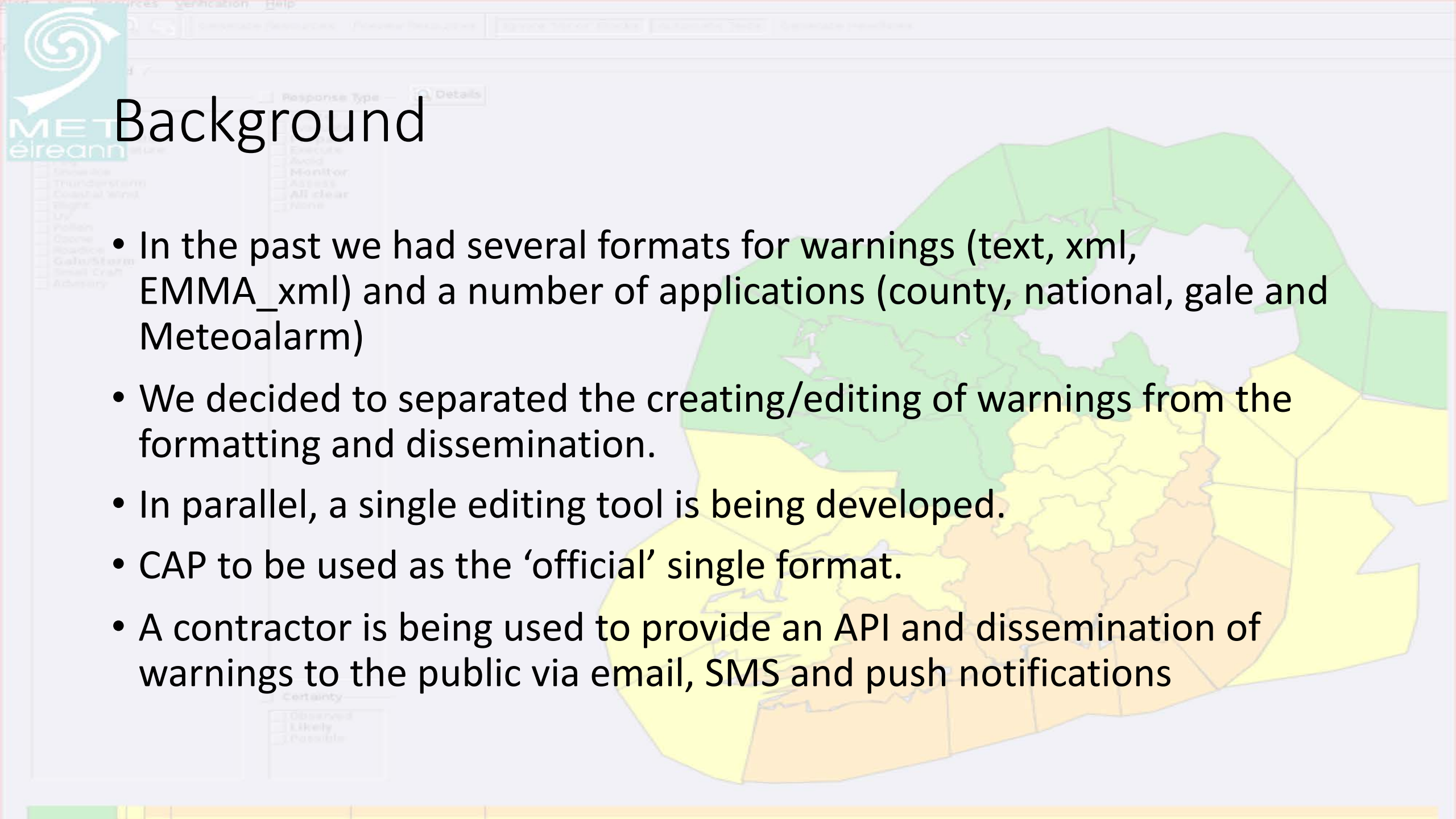
Background

- In the past we had several formats for warnings (text, xml, EMMA_xml) and a number of applications (county, national, gale and Meteoalarm)

- We decided to separated the creating/editing of warnings from the formatting and dissemination.

- In parallel, a single editing tool is being developed.

- CAP to be used as the 'official' single format.

- A contractor is being used to provide an API and dissemination of warnings to the public via email, SMS and push notifications
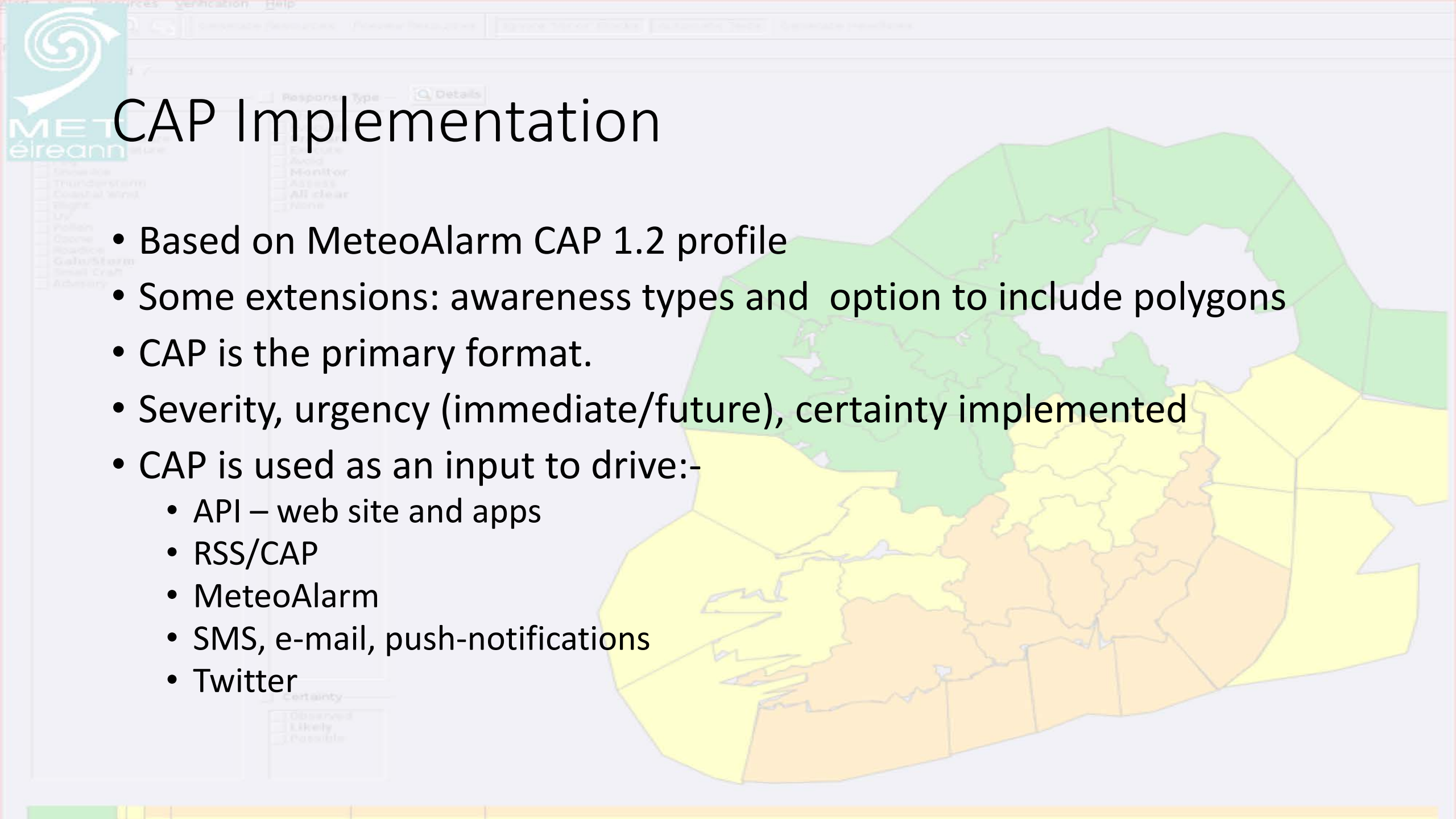
CAP Implementation

- Based on MeteoAlarm CAP 1.2 profile
- Some extensions: awareness types and option to include polygons
- CAP is the primary format.
- Severity, urgency (immediate/future), certainty implemented
- CAP is used as an input to drive:-
  - API – web site and apps
  - RSS/CAP
  - MeteoAlarm
  - SMS, e-mail, push-notifications
  - Twitter

CAP in Met Éireann
MeteoAlarm awareness-types:

Standard Meteoalarm awareness types used in Ireland.

Flooding and rain-flood may be added later.

| Type	Meteoalarm type	
"wind"	1	
"snow-ice"	2	
"thunder"	3	
"fog"	4	
"high-temperature"	5	
"low-temperature"	6	
"coastalevent"	7	
"rainfall"	10	

Local awareness-types:

A number of 'local' warnings have been added to the Meteoalarm list. Alerts will be sent to the public and subscribers.

Hail is not included in Meteoalarm so it is mapped onto Rain for CAP sent to Meteoalarm

None of these, except Hail, are sent to Meteoalarm

"blight"	21	
"advisory"	22	
"hail"	23	Mapped to type 10 for MA
"UV"	24	
Ozone	27	
Pollen	28	
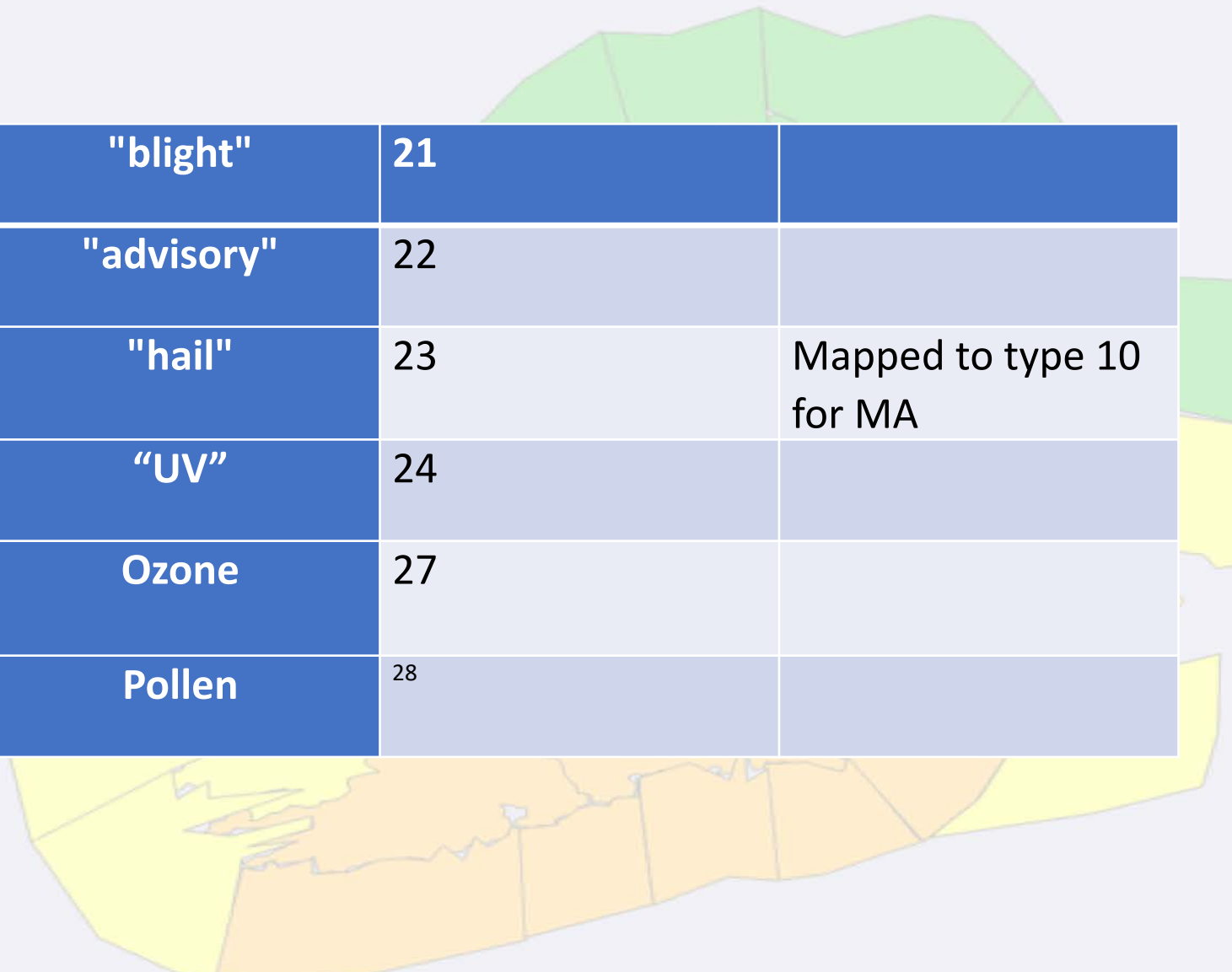
Special awareness-types

These are not typical warnings as they are one-off. The contents of the <header> are sent by SMS and eMail to lists of subscribers – airports and road agencies.
No expiry or updates.

Here we are using CAP as a vehicle for sending messages.

| AviationAD	25
AviaionWS	26
Roadice	29

Sea area warnings

All are of type Wind
Using <event> to separate Gale/Storm from Small Craft

Since both **Gale/Storm** and **Small Craft** are both Wind and have the same MeteoAlarm Awareness type we use <event> to separate them in CAP.

Downstream processing has to check the contents of <event> to separate these warnings

Small Craft is a special marine warning for leisure craft in in-shore waters.
Gale/Storm warning is for sea areas out to 30nm from the coast.

Warning	Awareness-type	Awareness-level	Event
Gale	1;wind	Moderate	Gale
Storm	1;wind	Severe	Orange Storm
Red Storm	1;wind	Extreme	Red Storm
Small Craft	1;wind	Moderate	Small Craft
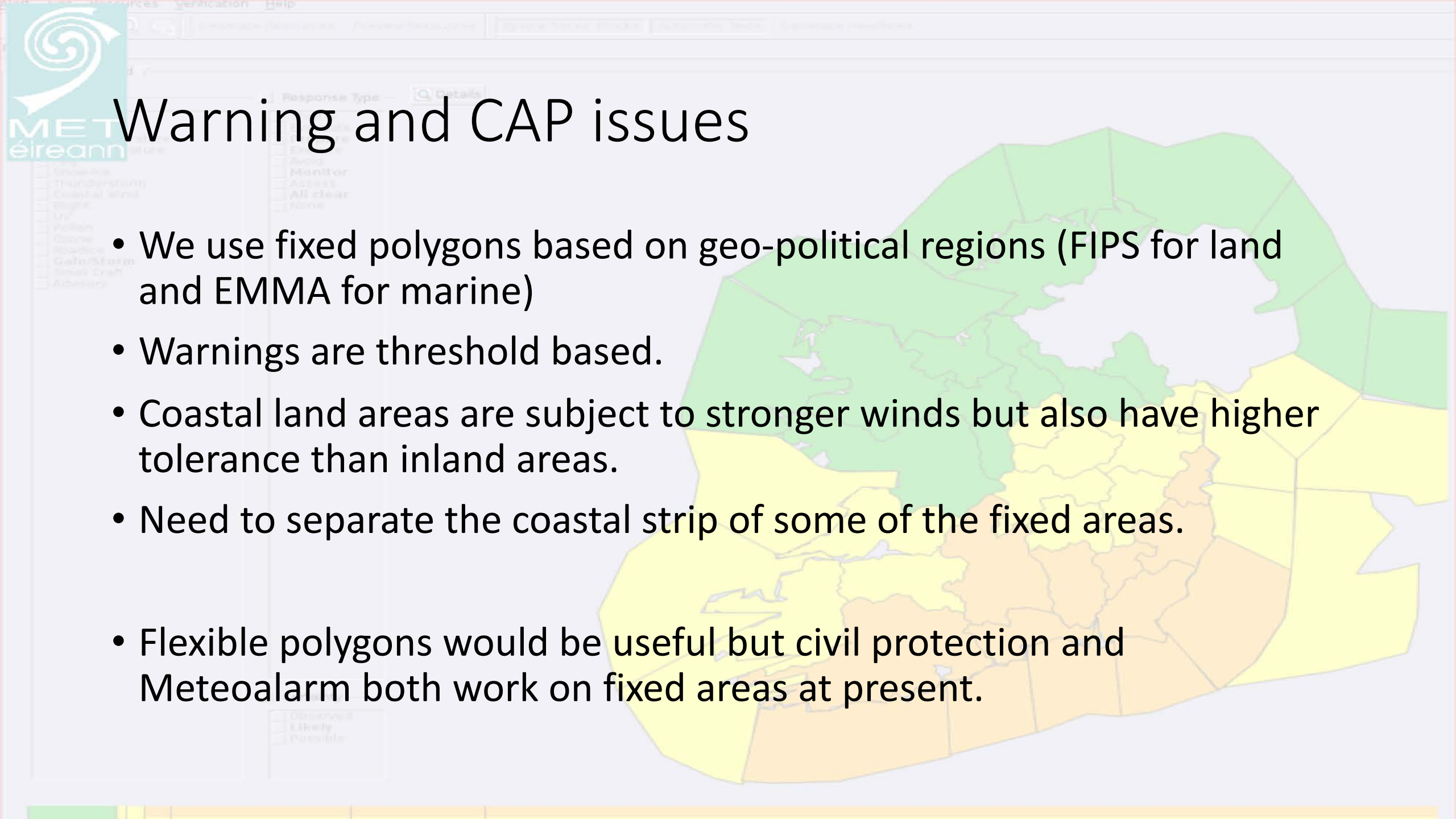
Warning and CAP issues

- We use fixed polygons based on geo-political regions (FIPS for land and EMMA for marine)

- Warnings are threshold based.

- Coastal land areas are subject to stronger winds but also have higher tolerance than inland areas.

- Need to separate the coastal strip of some of the fixed areas.

- Flexible polygons would be useful but civil protection and Meteoalarm both work on fixed areas at present.