



# Concept note for the European Code against Cancer interactive map

DELIVERABLE 6.2 OF ECL SGA 2017: 747456

ASSOCIATION OF EUROPEAN CANCER LEAGUES (ECL)



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## Background

The **European Code Against Cancer (ECAC)** is an initiative of the European Commission to inform people about actions they can take for themselves or their families to reduce their risk of cancer. First published in 1987, several editions of the ECAC have been published. The current fourth edition consists of twelve recommendations that most people can follow without any special skills or advice. The more recommendations people follow, the lower their risk of cancer will be. It has been estimated that almost half of all deaths due to cancer in Europe could be avoided if everyone followed the recommendations.

The **Association of European Cancer Leagues (ECL)** is a European umbrella organisation of national and regional cancer leagues in the extended European region. Founded in 1980, ECL has been providing a unique and important platform for cancer leagues ever since by providing a platform for collaboration and the exchange of best practice. Since 2015, ECL has received operating grant funding from the European Commission through the Third EU Health Programme (2014-2020). A core principle of this agreement between ECL and the European Commission has been the objective to promote the ECAC.

One of the primary methods used by ECL to promote the ECAC has been to organise regular networking opportunities for cancer leagues to discuss and share experiences regarding the dissemination and application of the ECAC. A key finding that arose from this work was the need for greater visual communication of the ECAC. Given the importance of not only promoting the ECAC as a tool for health promotion, but also as a guide for evidence-based policy-making to support cancer prevention in practice, ECL proposed to elaborate an interactive map based on the ECAC that would demonstrate, with appropriate indicators, the status of implementation and impact of the 12 messages from the current edition. This initiative would have the advantage of being potential useful to inform policy-making, whilst also being an attractive and informative visual communication tool.

This concept note outlines the main aim, objectives, and foreseen indicators for the complete version of the map. This document is an extension of the initial information provided to the external contractor who developed the proof of concept template for the map, which was used to visualise the 2016 Tobacco Report Scale. Based on the successful production of the template, the map will be



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gradually extended to other areas of the ECAC, following the broad agreement of cancer leagues as to the appropriate indicators for the visualisation of each message.



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## Aims

To create a dynamic, interactive map that allow users to click on a EU member state and get relevant statistics and information about how that country is performing in addressing the messages of the European Code against Cancer.

The indicators to be displayed for each message are to be agreed by cancer leagues and key actors from the European Commission. In addition, relevant stakeholders from the scientific community, especially the International Agency for Research on Cancer (IARC), are to be consulted.

To test the 'proof of concept', and develop a suitable template for the map, the results of the latest tobacco control scale (2016) have been used to create the first version of the map, which was completed in September 2017.

## Objectives

The main objectives of this concept are:

- To visualise the country data of the 2016 tobacco control scale, thereby establishing proof of concept for the interactive map;
- For visitors to the webpage to learn more about the situation, on a country by country basis, in respect of each area of the European Code against Cancer.
- To stimulate key actors and stakeholders to agree on measurable indicators, which can be used to estimate the impact of the ECAC messages over time. The agreed indicators can include epidemiological data, or public policy related information (e.g. implementation of smoke-free environment laws), and can link to existing reputable data sources, such as Eurostat.
- To support the development of dashboards, or other comparable data visualisation tools, to facilitate the comparison between countries in respect of the agreed indicators.



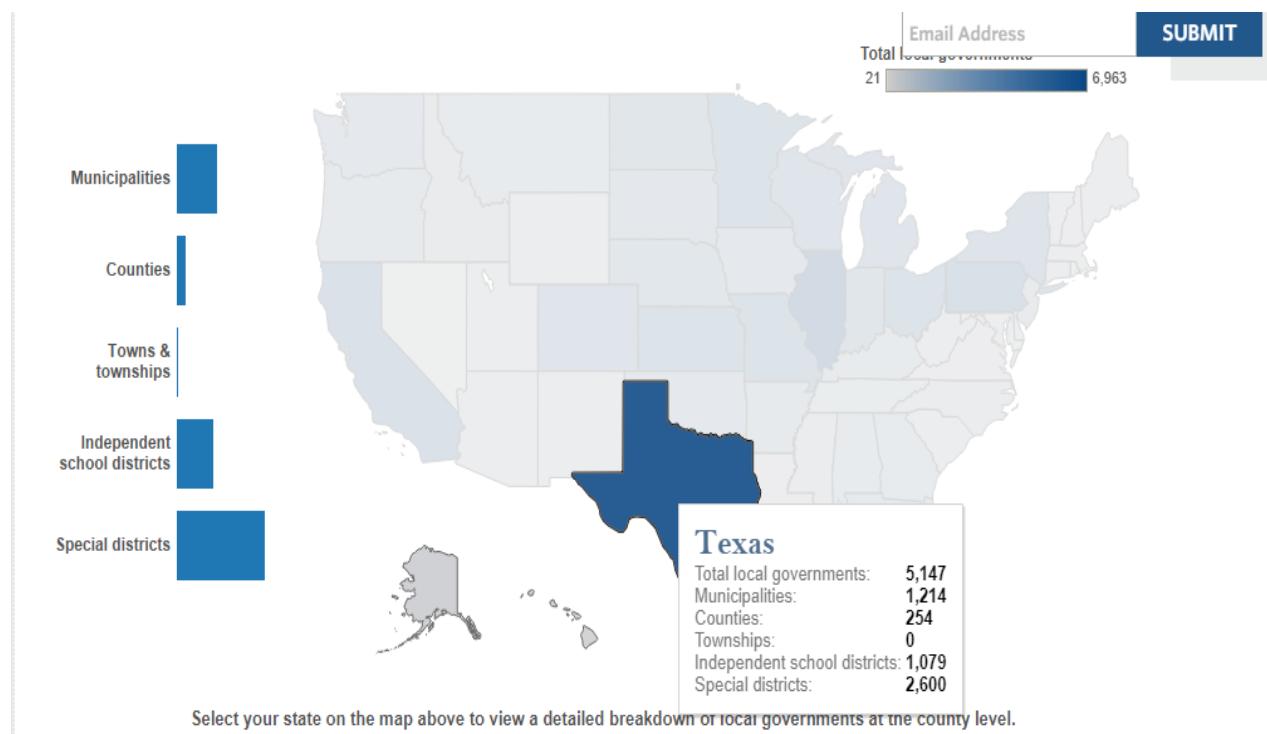
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## Proof of concept

The first objective was to develop suitable template which can be used for the 2016 tobacco control scale,<sup>1</sup> and then adapt this template, over time, to the messages of the ECAC.

The following example, from [pewtrusts.org](http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2013/09/30/interactive-the-many-layers-of-local-government), was one of the illustrations provided to the external contractor to provide some guidance on how the map could function:

<http://www.pewtrusts.org/en/research-and-analysis/blogs/stateline/2013/09/30/interactive-the-many-layers-of-local-government>.



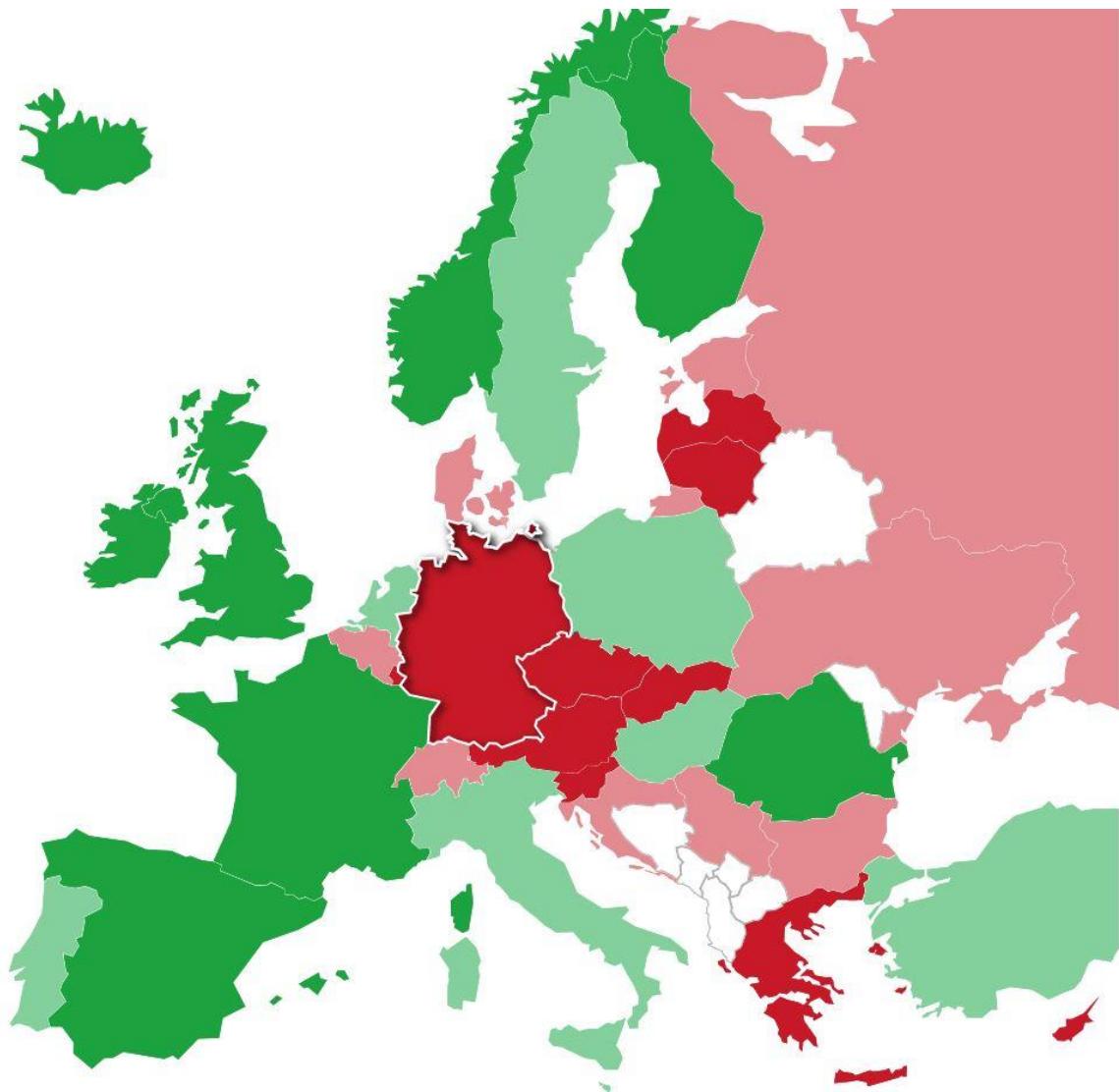
For this example, clicking on a state of the USA opens a pop-out dialogue box, with certain information clearly displayed, which was the general approach that was desired for the map, which is the process desired for the proof of concept map.

The tobacco control scale map itself must show each individual country included in the scale with their respective results according to each of the scoring criterion e.g. price, advertising, health warning, etc. All current 28 EU member states are included in the report.



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Screenshots of TCS 'proof of concept' map



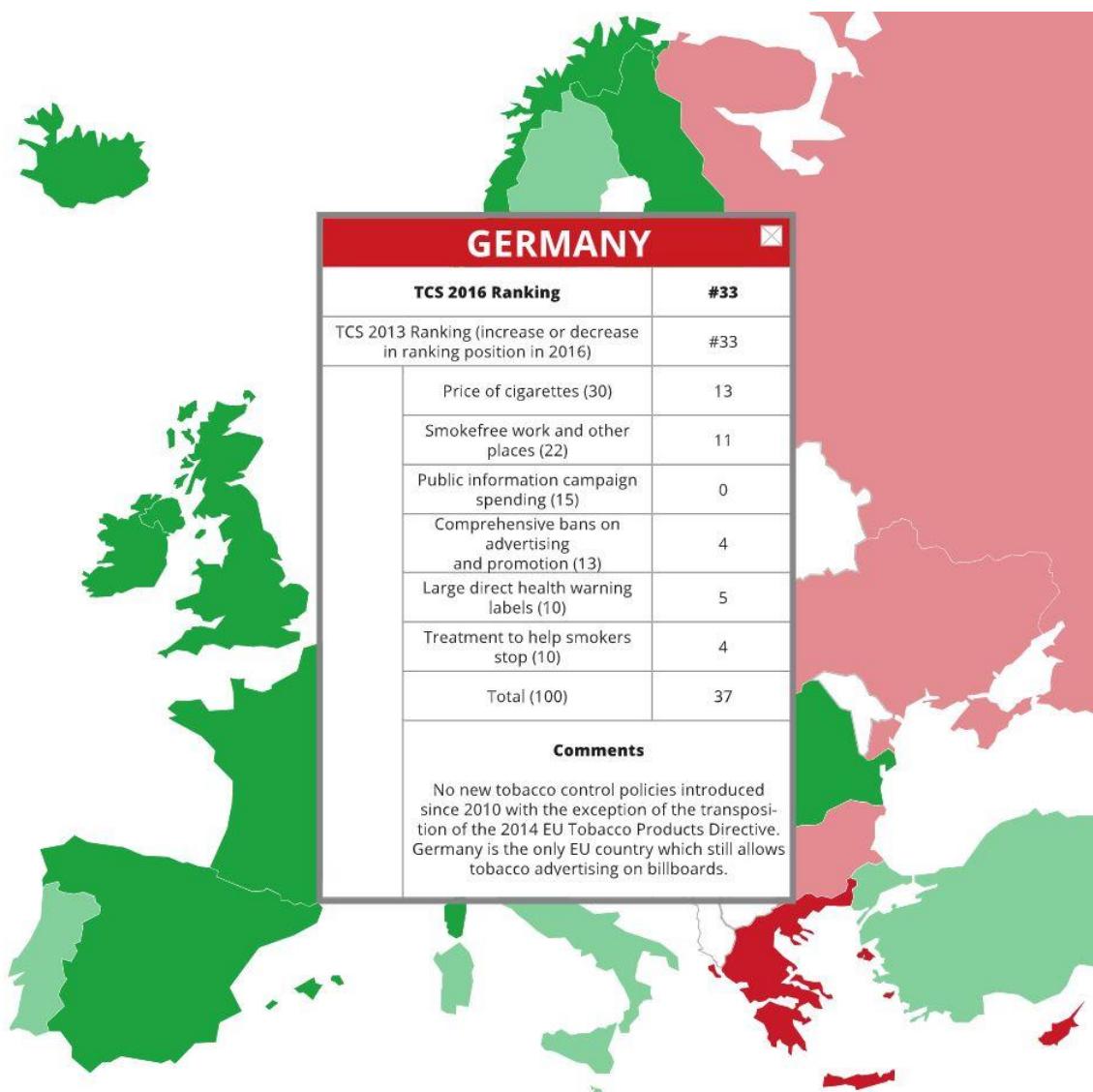
The above screenshot highlights the proof of concept map as it will appear on the ECL homepage (country of Germany is highlighted to show what happens when the cursor hovers over a country).

The colours of the countries represent the interquartile range of the scale, with dark green representing the highest quartile (best performers), dark red denoting the lowest quartile, and the shades in between denote the upper and lower middle ranges.

The following images shows the dialogue box that appears when a country is clicked on by a user:



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Once the proof of concept map is established, work begins to progressively implement the information pertaining to the 12 messages of the ECAC. To facilitate this, and in view of the added complexity of depicting indicators for all areas of the ECAC, further work is required to build on the proof of concept template to make it suitable for the ECAC messages and their eventual indicators.

To allow people to select the various messages of the ECAC and learn more about specific indicators related to those messages, a menu box is required to be added to the template. This will allow visitors to select an area of the code and the concomitant indicator(s) related to that message.



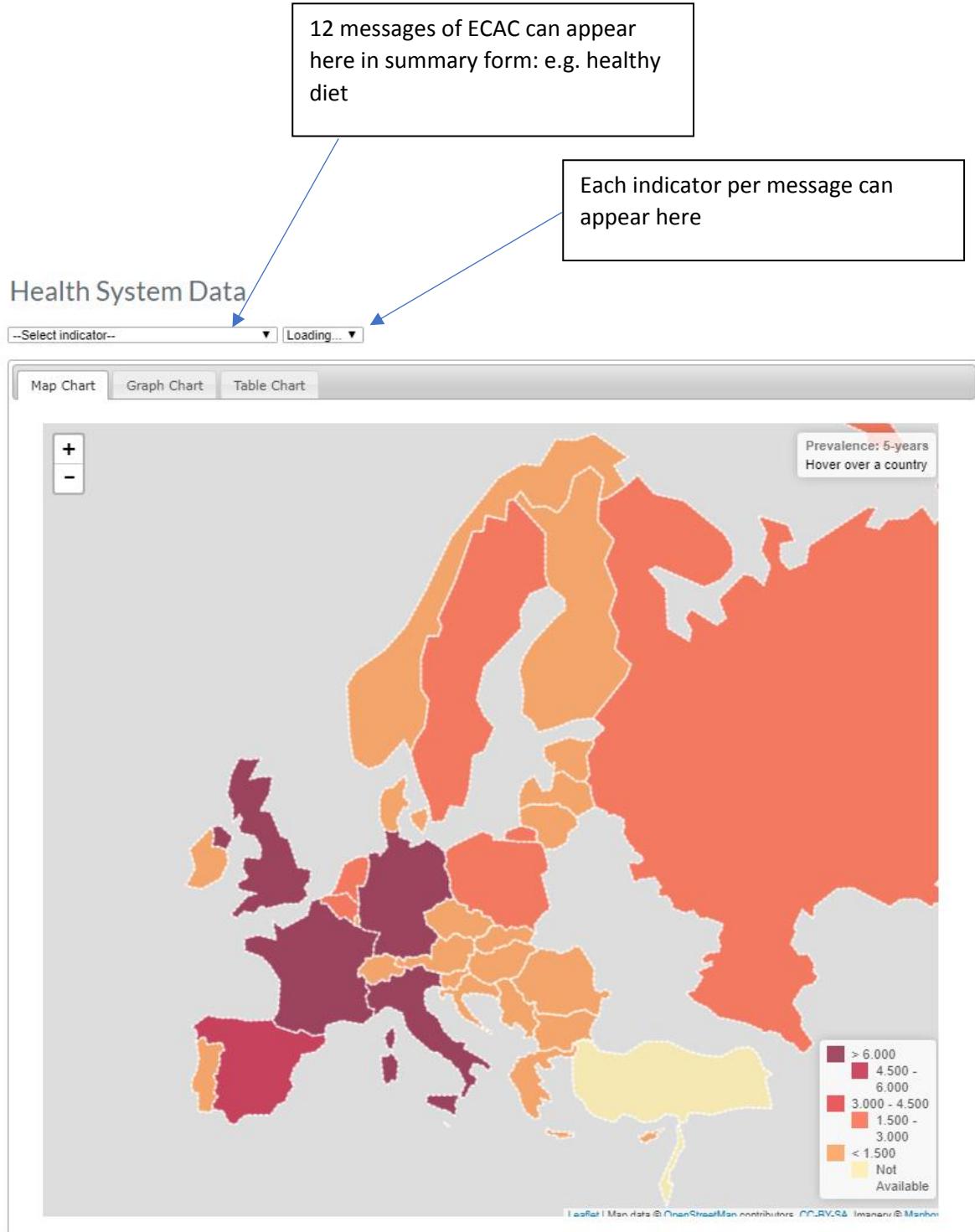
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We have found the following example which could be used to guide the development of this map:

<http://www.mpeurope.org/atlas/health-system-data/>



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## Target audience

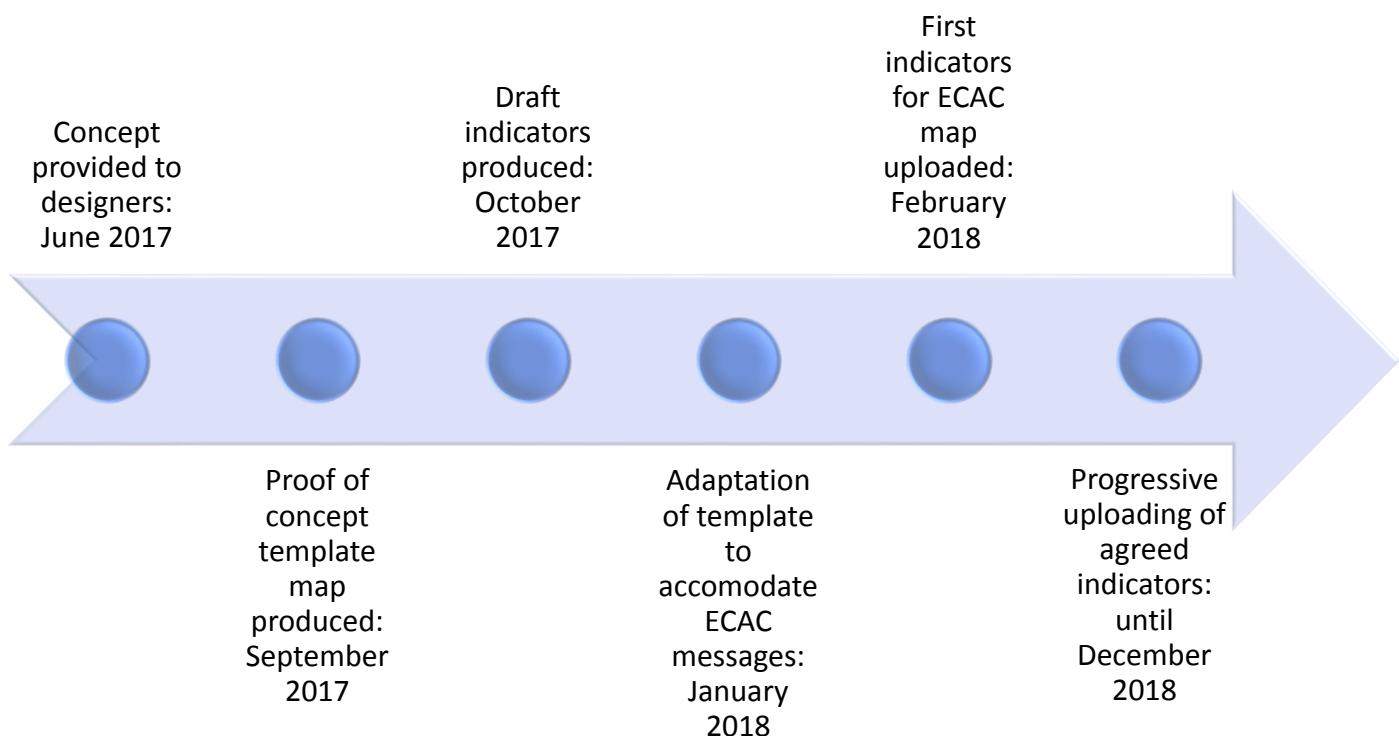


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The maps should be accessible and intuitive enough for a general, non-specialist audience. We want to avoid too much detail and information as this would be more than the average user would probably want.

The map should also be pertinent for researchers and policymakers, allowing them a simple snapshot of the selected indicators per message across each of the 28 EU member states.

### Timeline



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## Annexe

The proposed draft indicators per message of the ECAC:

ECAC messages	Indicator	Source	Comments
<b>1. Do Not Smoke</b>	Daily smokers of cigarettes, 2014 (% persons aged 15 and over)	Eurostat	To show reliable statistics for number of smokers per country.  Respected data source. Recent figures.
<b>2. Smoke free environments</b>	Score in Tobacco Control Scale for Public Space bans (scale: 0-22) 2016	Tobacco Control Scale 2016	Countries in TCS receive score up to Max. 22 based on survey data collected for the TCS which is updated every three years by ECL.
<b>3. Healthy Weight</b>	Proportion of overweight and of obese women/men & both sexes, 2014 (%)	Eurostat	To show prevalence of obesity in EU.  Respected data source. Recent figures.
<b>4. Physical activity</b>	Proportion of people (aged 18+) who spent at least two and a half hours per week exercising (150+ minutes)	Eurostat	To show prevalence of moderate physical activity in EU.  Respected data source. Some difficulty in reliably locating data.
<b>5. Healthy Diet</b>	Daily consumption of fruit and vegetables by sex, age and educational attainment level	Eurostat	Show intake of at least 5 per day of fruit and vegetables. However, more detailed information may be needed as ECAC message is more comprehensive than generic 5 a day recommendation, as it takes in wholegrains etc. Therefore, this indicator may not be acceptable to scientific authors of ECAC.
<b>6. Alcohol</b>	Alcohol, total (recorded + unrecorded) per capita (15+) consumption, projected estimates	WHO	Based on estimates for 2016.  Indicator within the EU based on reported data may be preferable.



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	for 2016		
<b>7. Sun Safety</b>	Estimated incidence from malignant melanoma of skin in both sexes, 2012; Age Standardised Rate (European) per 100,000	IARC	Skin cancer incidence for 2012 as best available indicator for this message.  Data in sunbed use and policy not easily available but could be located.
<b>8. Workplace Carcinogens</b>	Rough division of occupational cancer by EU28 member states and sub territories with the EU in 2011	OSHA	Basic calculation of mortality from aggregate figure.  More robust indicator could perhaps be found, focusing on policies rather than mortality.
<b>9. Radon Exposure</b>	Link to JRC indoor radon exposure map	JRC	Propose to link directly to complex indoor radon exposure map hosted by JRC – duplication should be avoided.
<b>10. Breastfeeding</b>	% exclusive breastfeeding 0-6months	WHO	Unreliable data covering very wide time ranges. Better data is needed
<b>11. Hepatitis B vaccination &amp; HPV Vaccination</b>	HEP B Vaccination implemented (up to 2012)  HPV vaccination implemented	WHO + journal articles  ECDC	Mixed data source questions completeness and accuracy of data – needs further work  Data taken from ECDC vaccine scheduler needs to be cross-checked for completeness
<b>12. Cancer Screening: Breast Cervix Colorectal</b>	Presence and characteristics of programmes, age range and screening interval (2016)	EUSR – screening implementation report published in 2017	Best available data on latest status of cancer screening in the EU (up to 2016);  Quite complex to portray in an easy to understand manner, given heterogeneity in cancer screening in EU.


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An excel sheet with data relating to the draft indicators is embedded in this document can be accessed by double-clicking the icon below:



ECAC atlas including  
tobacco control.xlsx

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<sup>1</sup> See <http://www.europeancancerleagues.org/tobacco-control/3-newsflashes/highlights/451-tobacco-control-ranking-scale-2016.html>



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