

Inventory of Screening Programmes across Europe



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*The EUS€REEN foundation consists of Representatives of the 41 countries in Europe

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General Screening Data

By Jan Kik



EUSCREEN study

I

- Data collection by questionnaires from 41 Horizon 2020 countries (2017-2018)

II

- Validation and clarification of the collected data

III

- Development of cost-effectiveness model (2017-2019)

IV

- Implementation of hearing screening in Albania (2018-2019) and vision screening in Romania (2018-2019)

V

- Cost-effectiveness model for introduction, modification and disinvestment of screening programs (2020)

Data collection

- Extensive questionnaire in three parts: hearing, vision and general paediatric screening
- Data provided by Country Representatives (CRs) from 41 Horizon 2020 countries
- Several countries outside Europe submitted data as well

Data collection

- Difficult to find general paediatric screening experts: in 22 of 41 countries a general CR was recruited; in the others hearing and/or vision CR's provided the general data
- Filling out the long and detailed questionnaire was a time-consuming task
- Intensified contacts with CRs after initial delay in data collection

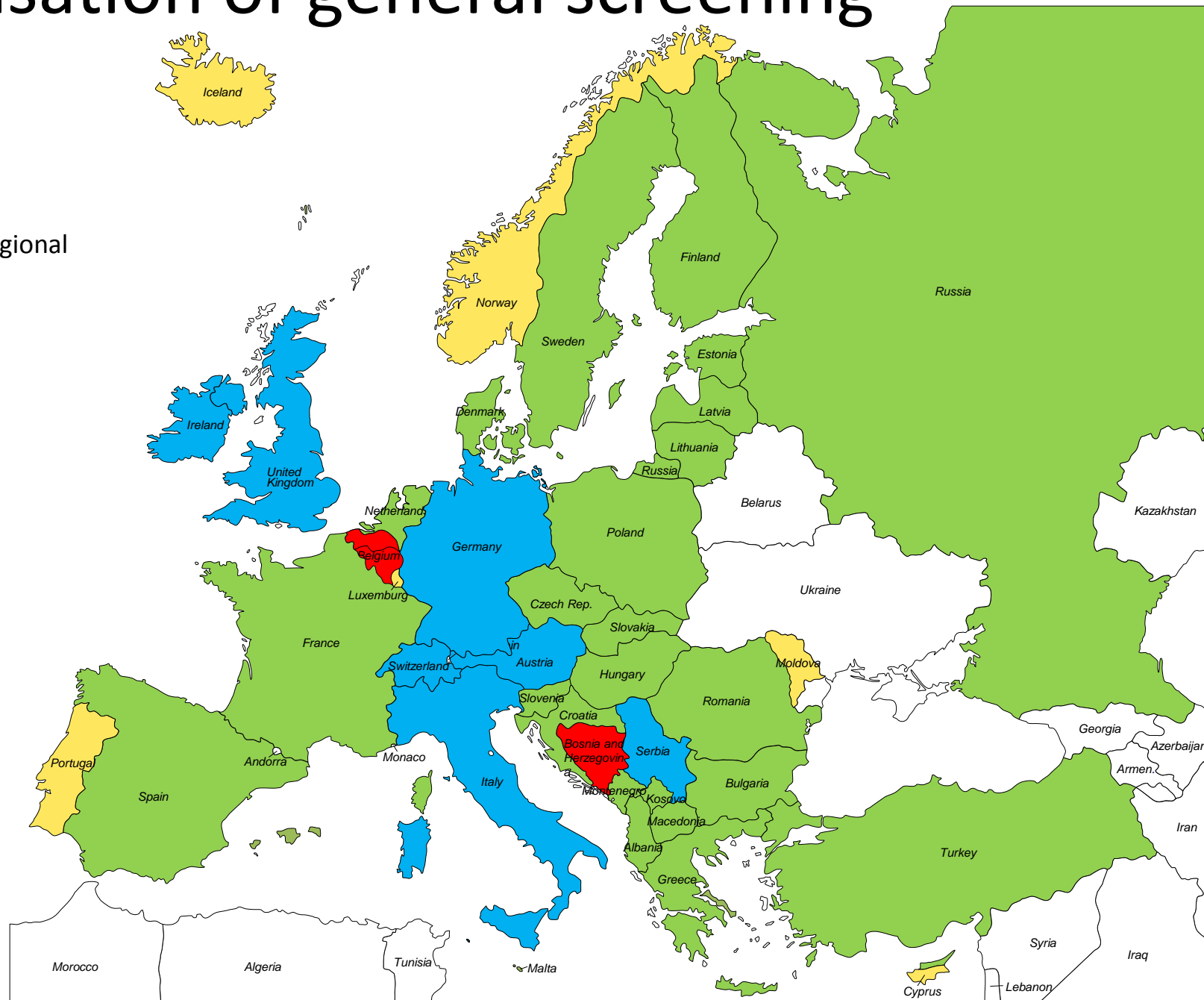
Data collection

- Most of the required data collected by the end of 2018
- Summaries on general screening now finalised for 39 countries: 36 Horizon 2020 countries plus India, Malawi and Russia
- Three countries did not submit sufficient data and four reports are still in progress

Organisation of general screening

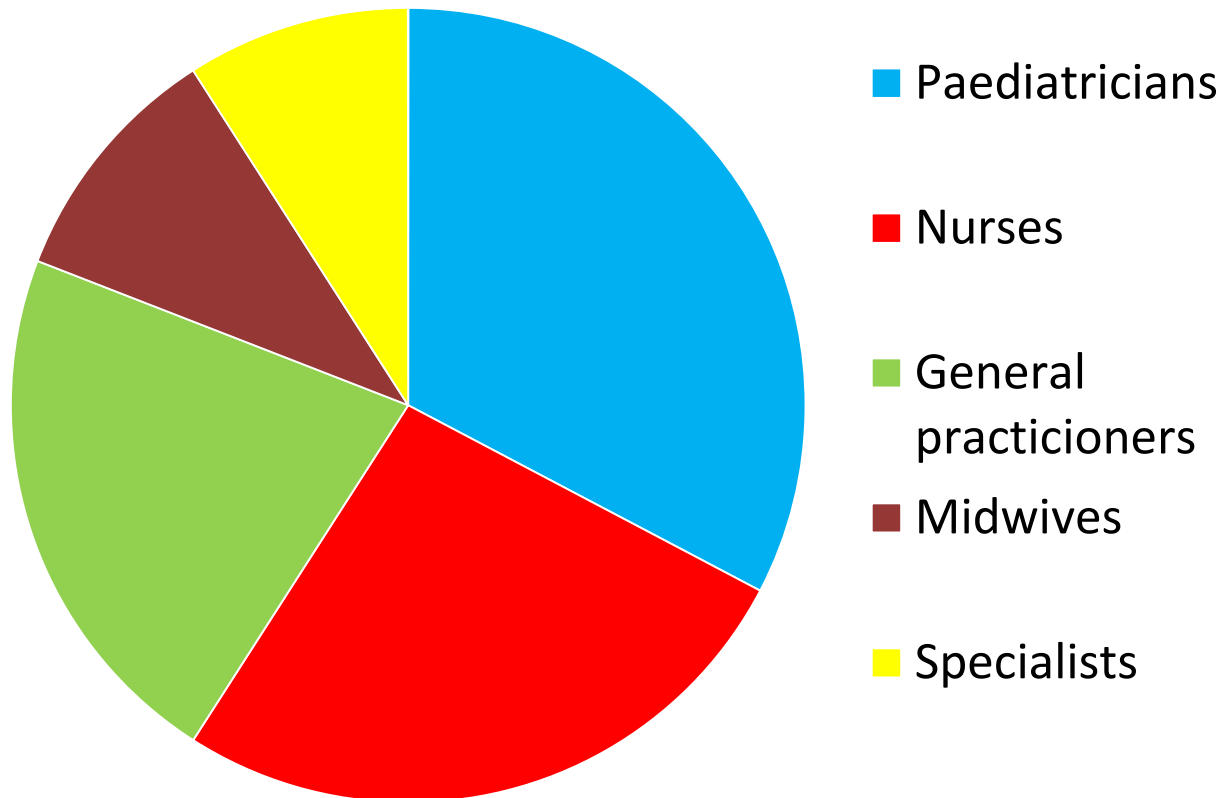
- National
- Regional
- National and regional
- Unknown

- Other countries**
- China
 - Faroe Islands
 - India
 - Israel
 - Malawi
 - Rwanda



Screening professionals

- 22 specific professionals were mentioned as professionals who perform screening



What tests are performed

Costs of screening

- 11 of 39 countries could provide (an estimate of) the costs of general paediatric screening per child per year
- The figures mentioned differ substantially
- In most countries screening is free of charge for parents (32 out of 39)
- Salaries of screening professionals vary greatly; seven countries were unable to provide data on this

Observations

- Almost all countries have various sorts of paediatric screening programmes
- There are substantial variations in:
 - What tests are administered
 - Ages when children are tested and frequency
 - The way screening is organised and by whom it is performed
- Data on these programmes is generally reported to not be easily accessible or unavailable

Monitoring

- If any information on the outcome of screening is collected at all, almost nowhere is this done systematically
- In most countries there is no government-imposed quality control of general paediatric screening

Vision Screening Data

By Mandy Nordmann



Vision screening

We collected data on vision screening in 41 countries in Europe and several outside Europe

Almost all data concerned measurement of visual acuity to detect amblyopia

Amblyopia must be detected and treated before the age of 7

Vision screening

- Organisation
 - National / Regional
- Funding
- Location

Organisation

- National
- Regional with national implementation
- Local with national implementation
- Regional/Local implementation
- Private

Other countries

Faroe Islands

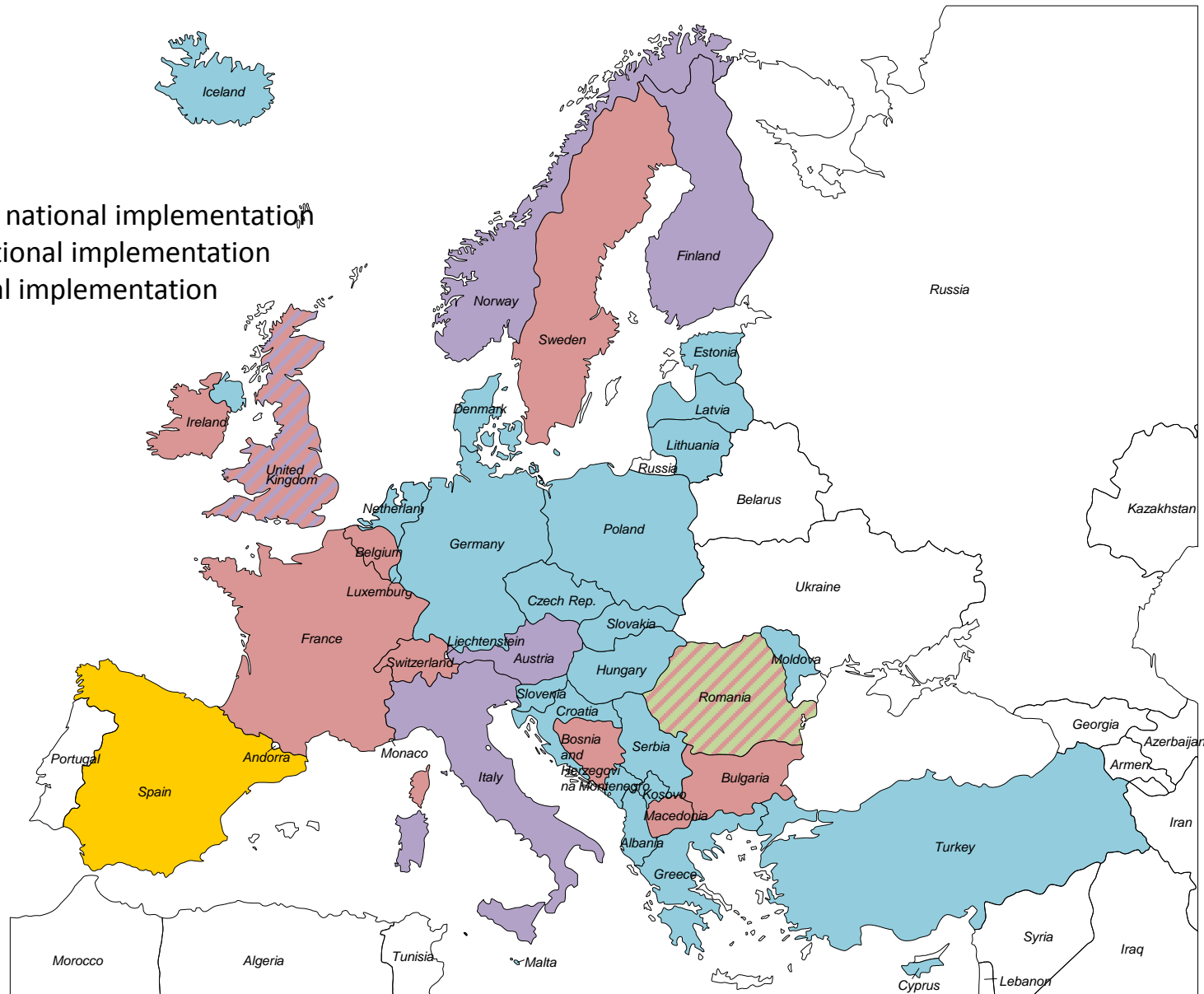
India

Israel

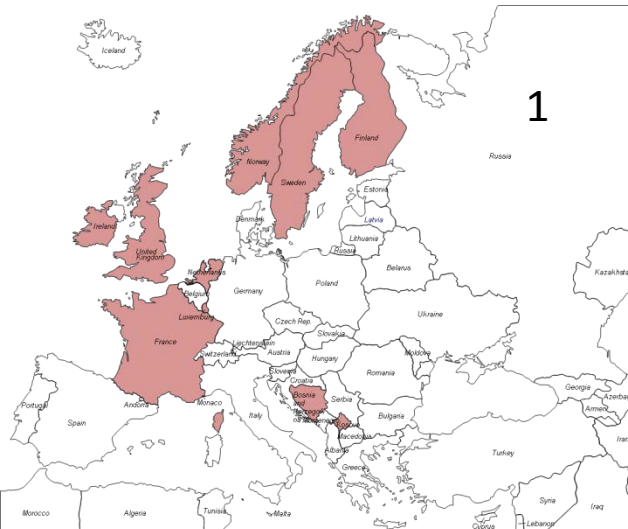
Malawi

Rwanda

China



Funding



1



2



3



4



5



6

1: Local Government
4: Health Insurance

2: Charity
5: Parents' Employer

3: Government
6: Parents

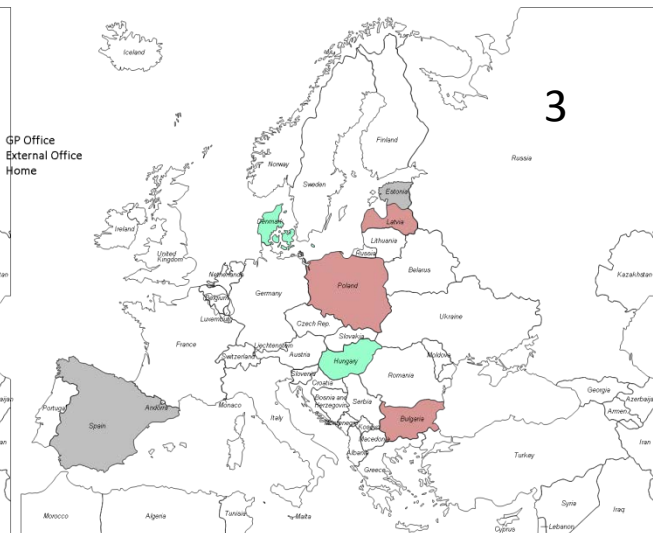
Locations of VA measurement



1



2



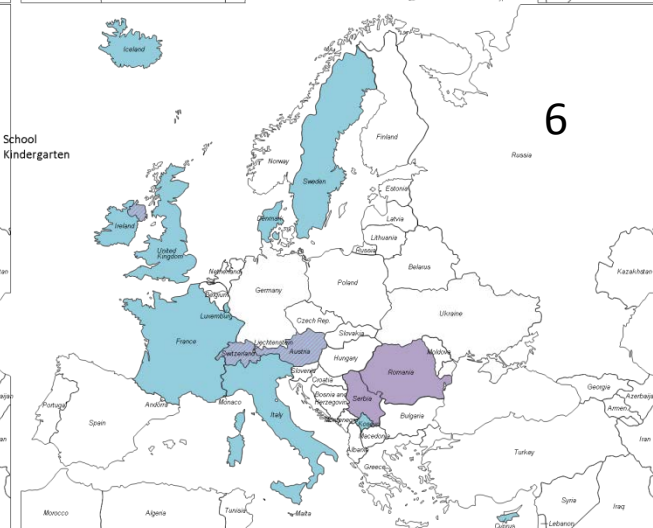
3



4



5



6

1: Child Health Care Center

4: Hospital

2: Eye Clinic

5: Private Clinic

3: GP Office, External Office, Home

6: School, Kindergarten

Hearing Screening Data

By Andrea Bussé



Hearing screening programmes

- Hearing screening right after birth
 - For infants born healthy
 - For infants ‘at risk’ for hearing impairment or infants admitted to NICU
- Hearing screening at (pre)school age
 - For (pre)school children age three to seven

Hearing screening programmes

- Hearing screening right after birth
 - For infants born healthy
 - For infants ‘at risk’ for hearing impairment or infants admitted to NICU
- Hearing screening at (pre)school age
 - For (pre)school children age three to seven

Hearing screening programme

Infants born healthy

Yes
No

Other countries

China
Faroe Islands
India
Israel
Malawi
Rwanda
South Africa

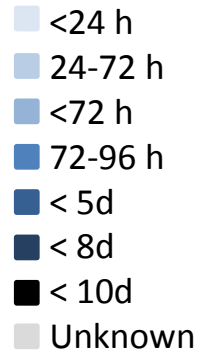


Neonatal hearing screening

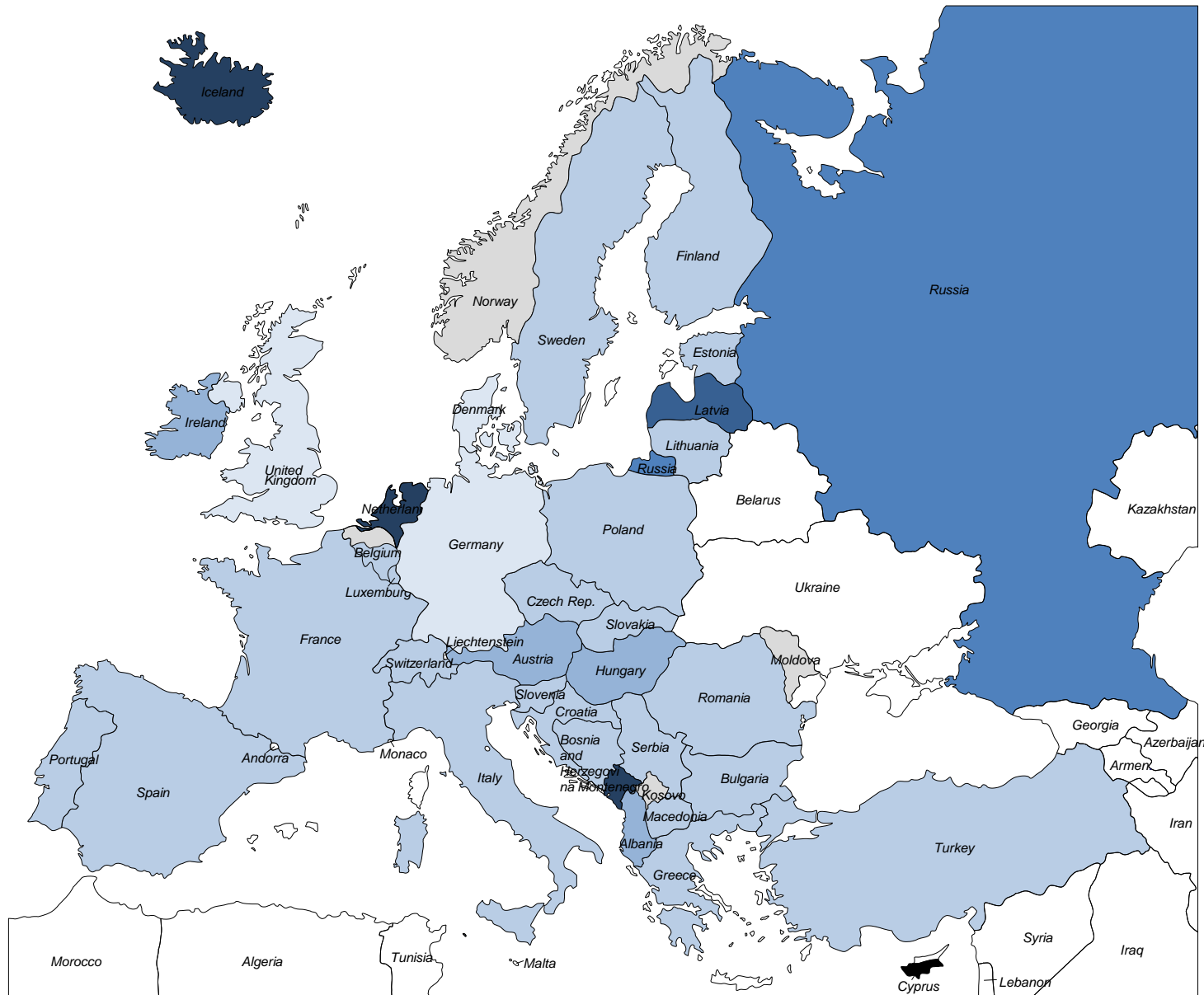
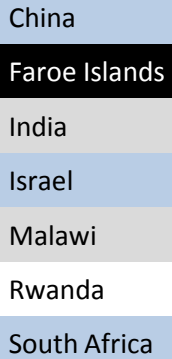
Healthy infants

- Timing
- Location
- Organisation
 - Universal (all infants)/ Selective (only infants at risk for hearing impairment or admitted to NICU)
 - National / Regional
- Funding
- Professionals

Healthy infants: Timing



Other countries



Healthy infants: Location

- Maternity hospital
- Audiology department
- Child health care clinic
- Private Clinic
- Home
- Unknown

Other countries

- China
- Faroe Islands
- India
- Israel
- Malawi
- Rwanda
- South Africa



Healthy infants: Universal - Selective

- Universal
- Selective (screening only infants 'at risk' for hearing impairment or admitted to NICU)
- Private hospitals only
- No screening protocol

Other countries

- China
- Faroe Islands
- India
- Israel
- Malawi
- Rwanda
- South Africa

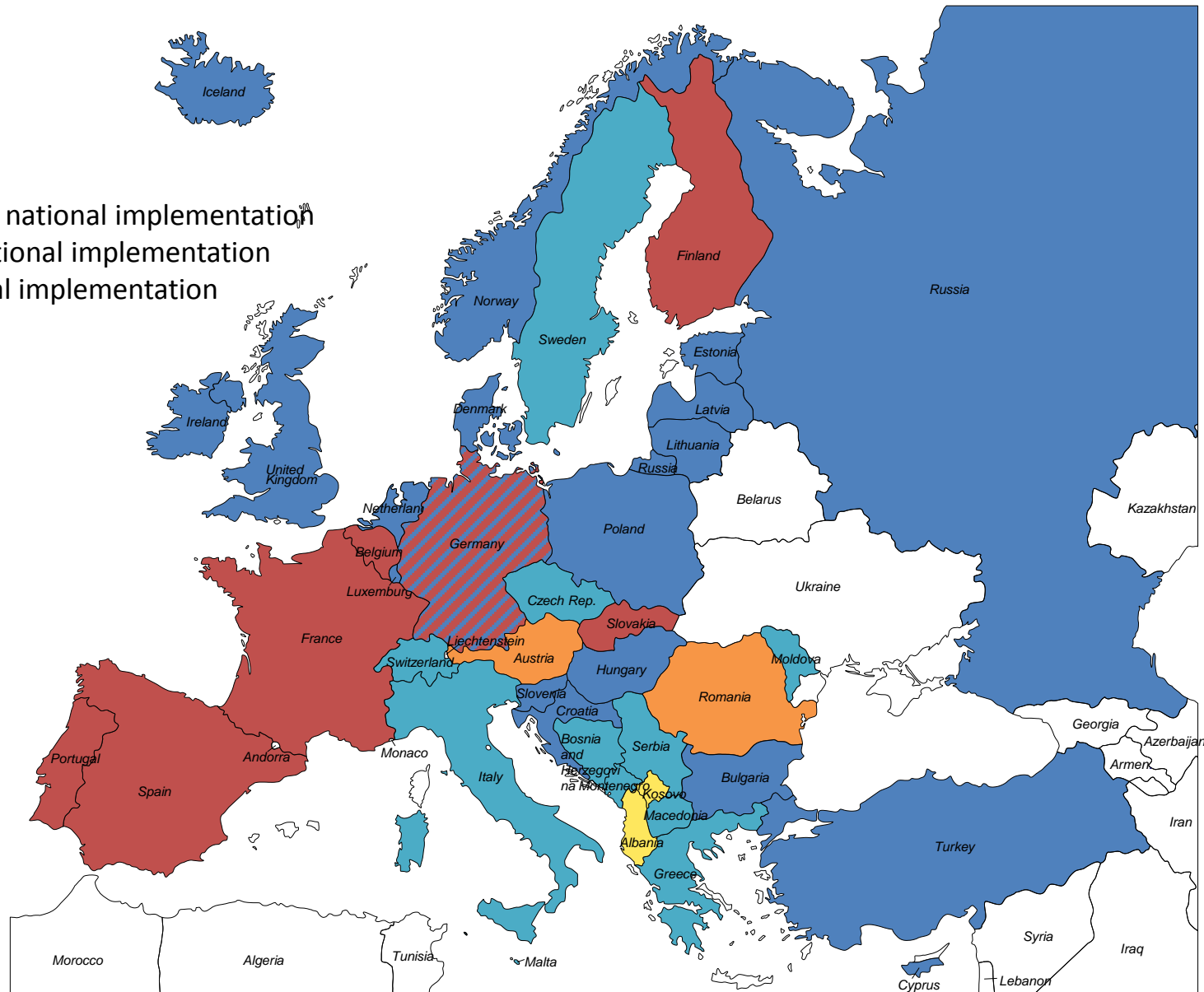


Healthy infants: Organisation

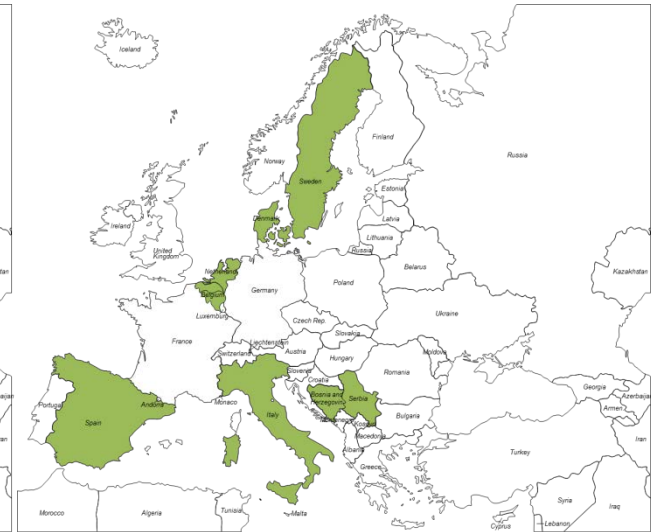
- National
- Regional with national implementation
- Local with national implementation
- Regional/Local implementation
- Private

Other countries

- China
- Faroe Islands
- India
- Israel
- Malawi
- Rwanda
- South Africa



Healthy infants: Funding

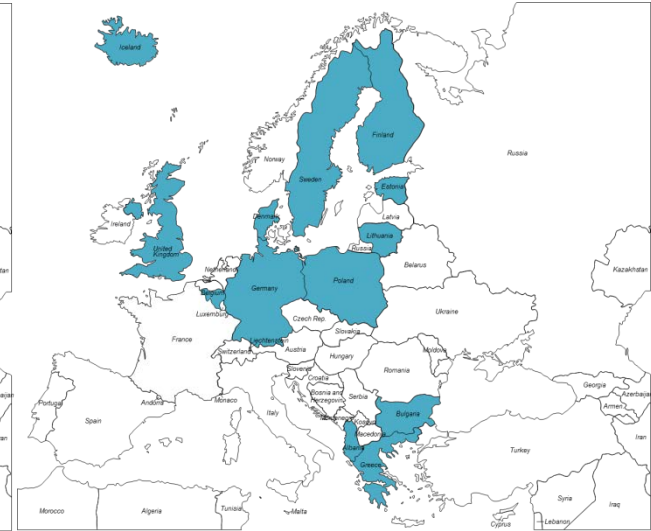
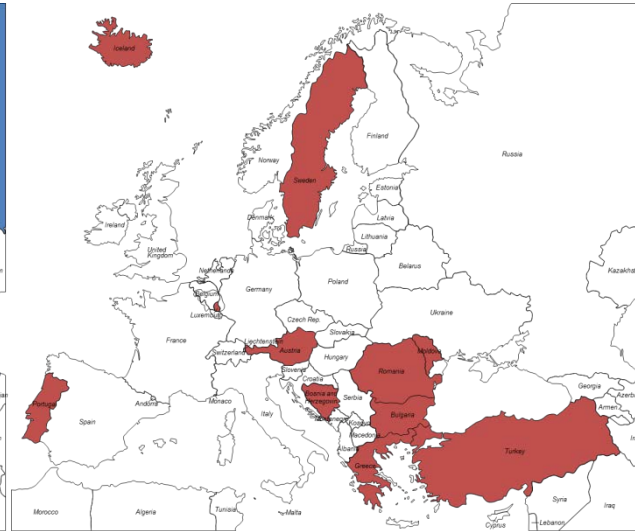
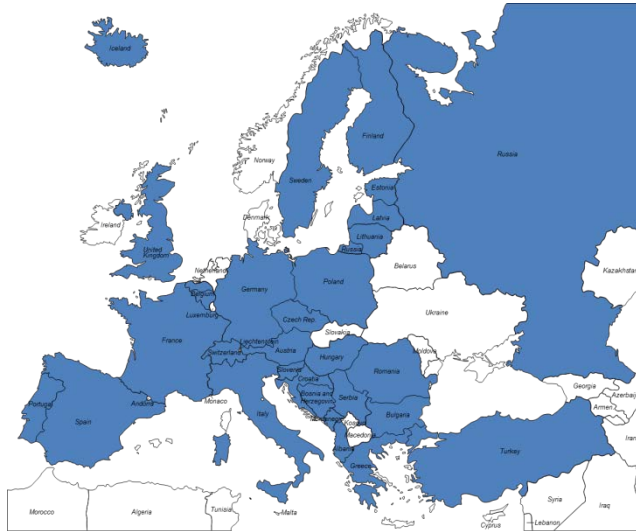


Other countries



- Government
- Parents
- Health Insurance
- Local government (Province or municipality)
- Hospital
- Charity
- Unknown

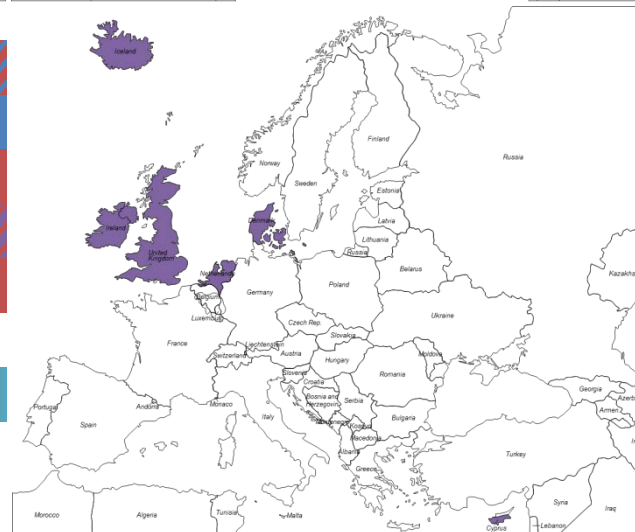
Healthy infants: Screening professionals



Other countries



- Nurses
- Speech Language Therapist or Audiologist
- Midwives
- Screeners
- Other



Hearing screening programmes

- Hearing screening right after birth
 - For infants born healthy
 - For infants ‘at risk’ for hearing impairment or infants admitted to NICU
- Hearing screening at (pre)school age
 - For (pre)school children age three to seven

Hearing screening programme

Infants 'at risk'/NICU

- Yes
- No
- Direct referral to diagnostics

Other countries

China
Faroe Islands
India
Israel
Malawi
Rwanda
South Africa



Hearing screening programmes

- Hearing screening right after birth
 - For infants born healthy
 - For infants ‘at risk’ for hearing impairment or infants admitted to NICU
- Hearing screening at (pre)school age
 - For (pre)school children age three to seven

Hearing screening programme at (Pre)school age

- Yes
- No
- Unknown



Other countries

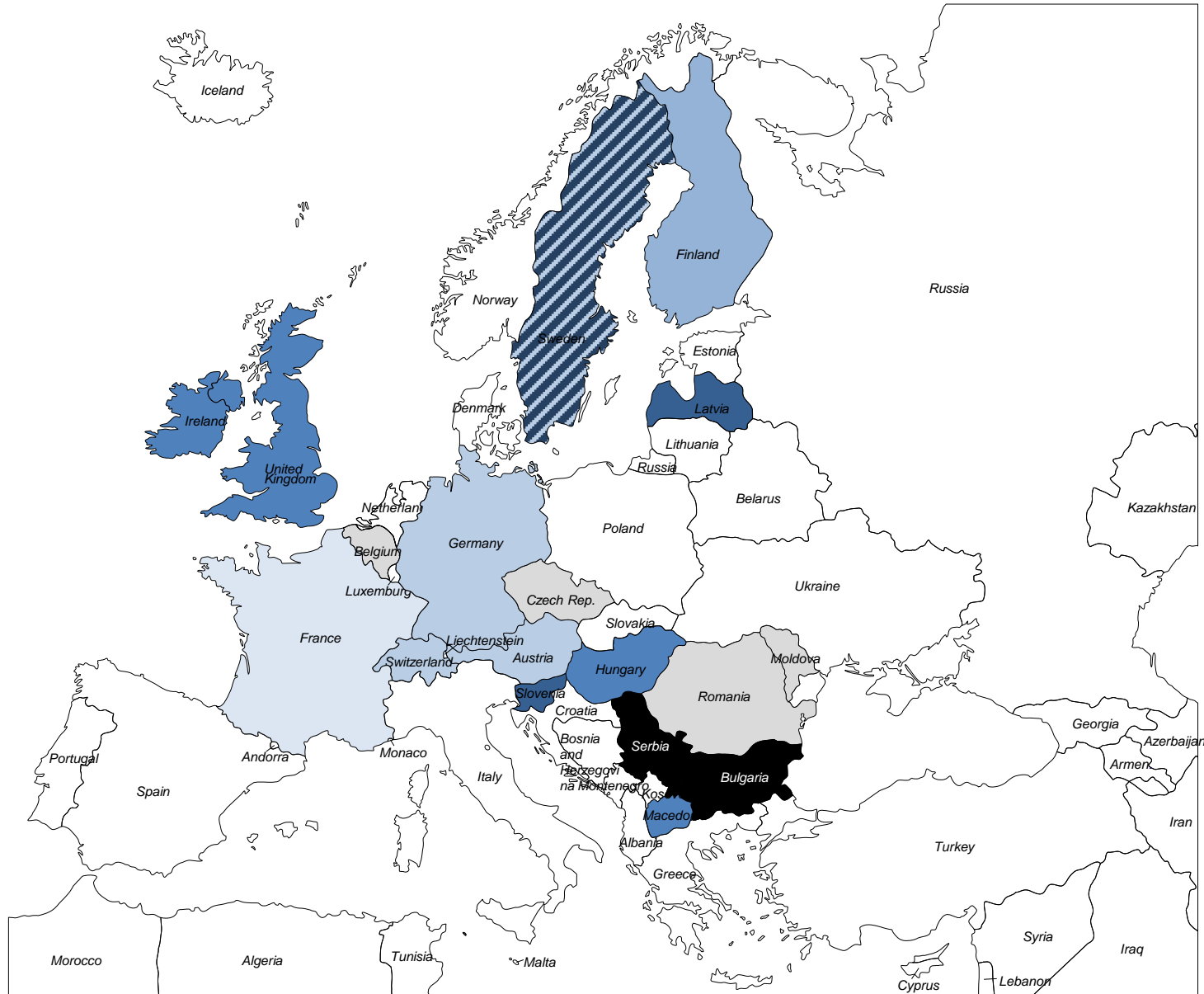
- China
- Faroe Islands
- India
- Israel
- Malawi
- Rwanda
- South Africa

(Pre)School: Timing

- 3-4 years
- 4 years
- 4-5 years
- 5 years
- 5-6 years
- 6 years
- 7 years
- Unknown

Other countries

- China
- Faroe Islands
- India
- Israel
- Malawi
- Rwanda
- South Africa



Country Representatives for Hearing Paediatric screening

Albania: Birkena Qirjazi, Austria: Daniel Holzinger, Belgium Flanders: Luc Stappaert, Belgium Wallonia: Bénédicte Vos, Bosnia and Herzegovina: Fuad Brkic, Bulgaria: Petar Rouev, China: Xiangyue Peng, Croatia: Marko Velepelic, Cyprus: Chryssoula Thodi, Czech Republic: Jakub Drsata, Denmark: Therese Ovesen, Estonia: Made Bambus, Maret Lepplaan, Faroe Islands: Bjarki Ellefsen, Finland: Riina Niemensivu, Tytti Willberg, France: Francoise Denoyelle, Germany: Peter Matulat, Greece: Thomas Nikolopoulos, Hungary: Anita Gaborjan, Iceland: Ingibjörg Hinriksdóttir, India: Zia Chaudhuri, Ireland: Gary Norman, Israel: Lisa Rubin, Italy: Alessandro Martini, Kosovo: Dugagjin Spanca, Latvia: Mareta Audere, Sandra Kuske, Lithuania: Eugenijus Lesinskas, Luxembourg: Jean Marc Hild, Macedonia: Marina Cakar, Malta: Tony Fenech, Malawi: Wakisa Mulwafu, Moldova: Doina Chiaburu, Montenegro: Tarik Kujundžić, Elvir Zvrko, Netherlands: Anneke Meuwese, Norway: Vinay Swarnalatha Nagaraj, Poland: Grażyna Greczka, Portugal: Luisa Monteiro, Romania: Madalina Georgescu, Russia: George Tavartkiladze, Serbia: Snezana Andric Filipovic, Galina Jokovic, Slovakia: Lenka Langova, Irina Sebova, Slovenia: Saba Battelino, South-Africa: DeWet Swanepoel, Spain: Faustino Nunez-Batalla (Asturia), Jose Miguel Sequi-Canet (Valencia), Sweden: Inger Uhlén, Switzerland: Buser Nora, Turkey: Mine Baydan, UK: Jolanta McCall

Country Representatives for Vision Paediatric screening

Albania: Alketa Tandili, Austria: Andrea Langmann, Belgium: Demet Yuksel, Bosnia and Herzegovina: Amra Nadarevic Vodencarevic, Bulgaria: Stela Dikova, China: Dongsheng Yang, Croatia: Mirjana Bjelos, Cyprus: Maria Theocharides, Czech Republic: Martin Hložánek, Denmark: Lotte Welinder, Estonia: Mari Levin, Faroe Islands: Elin Holm, Finland: Hanna-Mari Jauhonen, France: Dominique Brémond, Germany: Alexander Schuster, Greece: Asimina Mataftsi, Achilleas Attilakos, Hungary: Anna Soproni, Szilvia Berkes, Iceland: Elinborg Gudmundsdottir, India: Zia Chaudhuri, Ireland: Alex Doherty, Israel: Yair Morad, Italy: Davide Bottin, Andrea Lembo, Paolo Nucci, Kosovo: Naser Salihu, Latvia: Sandra Valeina, Lithuania: Ausrine Misevice, Luxembourg: Béatrice Planata-Bogdan, Macedonia: Valvita Reçi, Hristijna Duma, Malawi: Wakisa Mulwafu, Malta: Martin Francalanza, Moldova: Ala Paduca, Montenegro: Haris Kujundžić, Netherlands: Jan Roelof Polling, Norway: Goran Petrovski, Olav Haugen, Poland: Alina Bakunowicz-Łazarczyk, Romania: Teodora Cocis, Rwanda: Piet Noë, Lieke Gouma, Serbia: Branislav Stanković, Slovakia: Alena Furdova, Dana Tomcikova, Slovenia: Branka Stirn Kranjc, Spain: Rosario Gomez de Liano Sanchez, Sweden: Emelie Gyllencreutz, Switzerland: Veit Sturm, Turkey: Huban Atilla, UK England & Wales: Tom Lomas, UK Northern Ireland: Sara McCullough, Kathryn Saunders, UK Scotland: Lee Pentland

Country Representatives for General Paediatric screening

Albania: Genc Burazeri, Austria: Florian Stigler, Belgium Flanders: Yuksel Demet, Belgium Wallonia: Bénédicte Vos, Bosnia and Herzegovina: Fahrija Skokic, Bulgaria: Lidia Georgieva, China: Dongsheng Yang, Croatia: Mirjana Bjelos, Cyprus: Marios Vogazianos, Czech Republic: Martin Hlozanek, Denmark: Lotte Welinder, Therese Ovesen, Estonia: Maarja Karu, Faroe Islands: Djoni Joensen, Finland: Marke Hietanen-Peltola, France: Francoise Denoyelle, Dominique Brémond-Gignac, Germany: Alexander Schuster, Waffaa Shehata-Dieler, Peter Matulat, Greece: Vasiliki Papaevaggelou, Hungary: Szilvia Berkes, Anna Soproni, India: Zia Chaudhuri, Ireland: Alex Doherty, Israel: Lisa Rubin, Yair Morad, Italy: Andrea Lembo, Davide Bottin, Paolo Nucci, Kosovo: Naser Salihu, Latvia: Antra Valdmane, Lithuania: Nijolė Drazdienė, Malawi: Wakisa Mulwafu, Malta: Victoria Farrugia Sant Angelo, Moldova: Doina Chiaburu, Montenegro: Enisa Kujundzic, Netherlands: Jan Roelof Polling, North Macedonia: Gordana Ristovska, Norway: Goran Petrovski, Poland: Monika Zych, Romania: Oana Geambasu, Russia: George Tavartkiladze, Rwanda: Lieke Gouma, Serbia: Mirjana Zivkovic Sulovic, Slovakia: Dana Tomcikova, Slovenia: Mojca Juricic, Spain: Jose Miguel Sequi-Canet, Sweden: Emelie Gyllenkreutz, Switzerland: Susanne Stronski, Turkey: Betul Ulukol, UK: Tom Lomas, Sarah McCullough, Lee Pentland