|  |  |  |
| --- | --- | --- |
| A black and white logo  Description automatically generated with low confidence | INTERNATIONAL TELECOMMUNICATION UNION**TELECOMMUNICATIONSTANDARDIZATION SECTOR**STUDY PERIOD 2022-2024 | FG-AI4H-Q-200 |
| ITU-T Focus Group on AI for Health |
| Original: English |
| **WG(s):** | Plenary | Douala, 6-9 December 2022 |
| **DOCUMENT** |
| **Source:** | TSB |
| **Title:** | List of FG-AI4H deliverables (as of 2022-12-09) |
| **Purpose:** | Admin |
| **Contact:** | TSB | Tel: +41-22-730-6805E-mail: tsbfgai4h@itu.int  |

|  |  |
| --- | --- |
| **Abstract:** | This document summarizes the current status of the planned deliverables for the ITU-T Focus Group on AI for health (FG-AI4H), based on the output list from the meeting in Douala, Cameroon, 6-9 December 2022, as found in Q-200 / DEL00S and subsequent updates by the secretariat. |

NOTE – Latest version of deliverables are stored in the FG-AI4H collaboration area at <https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/SitePages/Deliverables.aspx>. The page will be updated after each FG-AI4H meeting.

Table 1 – Updated list of deliverables (updated version of Q-005)

| No. | Deliverable | Updated initial draft editor | Availability\* |
| --- | --- | --- | --- |
| 0 | Overview of the FG-AI4H deliverables | Shan Xu (CAICT, China) | [P-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-044.docx) |
| *0.1* | *Common unified terms in artificial intelligence for health* | *Markus Wenzel* *(Fraunhofer HHI, Germany)* | [*P-201*](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-201.docx)*(agreed)* |
| *1* | *AI4H ethics considerations* | *Andreas Reis* *(WHO)* | [*O-201*](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-201.docx)(*agreed at O)* |
| *2* | *Overview of regulatory considerations on artificial intelligence for health* | *Shada Alsalamah* *(WHO)* | [*P-202*](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-202.docx)*(agreed at P)* |
| 2.1 | Mapping of IMDRF essential principles to AI for health software | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (Technical Consultant eHealth, India), Pat Baird (Philips, USA), Thomas Wiegand (Fraunhofer HHI, Germany) | [G-038](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038.docx), [G-038-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-038-A01.xlsx) |
| *2.2* | *Good practices for health applications of machine learning: Considerations for manufacturers and regulators* | *Pradeep Balachandran* *(India) and* *Christian Johner* *(Johner Institut, Germany)* | [*P-203*](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-203.docx)*(agreed at P)* |
| 3 | AI4H requirement specifications | Pradeep Balachandran (India) | [O-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-N-032.docx) |
| 4 | AI software life cycle specification | Pat Baird (Philips, USA) | [J-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-J-033.docx)([L-046](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-046.pptx)) |
| 5 | Data specification | Marc Lecoultre (MLlab.AI, Switzerland) | [G-205](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205.docx%22%20%5Ct%20%22_blank) |
| 5.1 | Data requirements | [Marc Lecoultre (MLlab.AI, Switzerland)]\*\* | [I-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-044.docx) |
| 5.2 | Data acquisition  | Rajaraman (Giri) Subramanian (Calligo Tech, India), Vishnu Ram (India) | [G-205-A02](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-205-A02.docx) |
| 5.3 | Data annotation specification | Shan Xu (CAICT, China), Harpreet Singh (ICMR, India), Sebastian Bosse (Fraunhofer HHI, Germany) | [M-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-045.docx) |
| 5.4 | Training and test data specification  | Luis Oala (Fraunhofer HHI, Germany), Pradeep Balachandran (India) | [I-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-034.docx)([L-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-045.pptx)) |
| 5.5 | Data handling  | Marc Lecoultre (MLlab.AI, Switzerland) | [I-045](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-045.docx) |
| 5.6 | Data sharing practices | Ferath Kherif (CHUV, Switzerland), Banusri Velpandian (ICMR, India), WHO Data Team | [L-044](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-044.pptx) |
| 6 | AI training best practices specification | Xin Ming Sim and Stefan Winkler (AI Singapore) | [K-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-037.docx%22%20%5Ct%20%22_blank) |
| 7 | AI for health evaluation considerations | Markus Wenzel (Fraunhofer HHI, Germany) | [Q-030-R01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-030-R01.docx) |
| 7.1 | AI4H evaluation process description | Vacant | [G-207-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-G-207-A01.docx) |
| 7.2 | AI technical test specification | Auss Abbood (Robert Koch Institute, Germany) | [I-027](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-027.docx%22%20%5Ct%20%22_blank)([L-051](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-051.pptx)) |
| 7.3 | Data and artificial intelligence assessment methods (DAISAM) reference | Luis Oala (Fraunhofer HHI, Germany) | [P-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-032.docx)([L-052](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-052.pptx)) |
| 7.4 | Clinical evaluation of AI for health | Naomi Lee (Lancet, UK), Eva Weicken (Fraunhofer HHI, Germany), Shubhanan Upadhyay (ADA Health, Germany) | [Q-033](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-033.docx) |
| 7.5 | Assessment platform | Luis Oala (Fraunhofer HHI), Marc Lecoultre and Steffen Vogler (Bayer AG, Germany) | [I-037](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-037.docx) |
| 8 | AI4H scale-up and adoption | Sameer Pujari (WHO), Yu Zhao and Javier Elkin [Previously: Robyn Whittaker (New Zealand)] | –([O-056](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-056.pptx)) |
| 9 | AI4H applications and platforms | Manjeet Chalga (ICMR, India) | [L-050](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-L-050.docx)([P-055](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-P-055.pptx)) |
| 9.1 | Mobile applications | Khondaker Mamun (UIU, Bangladesh), Manjeet Chalga (ICMR, India) | [Q-047](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FG-AI4H-Q-047.docx) |
| 9.2 | Cloud-based AI applications | Khondaker Mamun (UIU, Bangladesh) | [I-049](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-I-049.docx) |
| 10 | AI4H use cases: Topic description documents | Eva Weicken (Fraunhofer HHI, Germany) | [Q-032](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-032.docx) |
| 10.1 | Cardiovascular disease management (TG-Cardio) | Benjamin Muthambi (Watif Health, South Africa) | [Q-006-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-006-A01.docx) |
| 10.2 | Dermatology (TG-Derma) | Harsha Jayakody (Flash Health, Sri Lanka), Ivy Lee (American Academy of Dermatology, USA) | [Q-007-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-007-A01.docx) |
| 10.3 | Diagnosis of bacterial infection and anti-microbial resistance (TG-Bacteria) | Nada Malou (MSF, France) | [Q-008-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-008-A01.docx) |
| 10.4 | Falls among the elderly (TG-Falls) | Pierpaolo Palumbo (University of Bologna, Italy) | [Q-012-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-012-A01.docx) |
| 10.5 | Histopathology (TG-Histo) | Frederick Klauschen (LMU Munich & Charité Berlin, Germany) | [Q-013-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-013-A01.docx) |
| 10.6 | Malaria detection (TG-Malaria) | Rose Nakasi (Makerere University, Uganda) | [Q-014-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-014-A01.docx) |
| 10.7 | Maternal and child health (TG-MCH) | Alexandre Chiavegatto Filho (University of São Paulo, Brazil) | [Q-015-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-015-A01.docx) |
| 10.8 | Neurological disorders (TG-Neuro) | Marc Lecoultre (MLlab.AI, Switzerland) and Ferath Kherif (CHUV, Switzerland) | [Q-016-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-016-A01.docx) |
| 10.9 | Ophthalmology (TG-Ophthalmo) | Arun Shroff (MedIndia) | [Q-017-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-017-A01.docx) |
| 10.10 | Outbreak detection (TG-Outbreaks) | Auss Abbood and Alexander Ullrich (Robert Koch Institute, Germany); Khahlil Louisy and Alexander Radunsky (Institute for Technology & Global Health, ITGH, US) | [Q-018-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-018-A01.docx) |
| 10.11 | Psychiatry (TG-Psy) | Nicolas Langer (ETH Zurich, Switzerland) | [Q-019-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-019-A01.docx) |
| 10.12 | AI for radiology (TG-Radiology) | Darlington Ahiale Akogo (minoHealth AI Labs, Ghana) | [Q-023-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-023-A01.docx) |
| 10.13 | Snakebite and snake identification (TG-Snake) | Rafael Ruiz de Castaneda (UniGE, Switzerland) | [Q-020-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-020-A01.docx) |
| 10.14 | Symptom assessment (TG-Symptom) | Henry Hoffmann (Ada Health, Germany) and Martin Cansdale (Healthily, UK) | [Q-021-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-021-A01.docx) |
| 10.15 | Tuberculosis (TG-TB) | Manjula Singh (ICMR, India) | [Q-022-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-O-022-A01.docx) |
| 10.16 | Volumetric chest CT (TG-DiagnosticCT) | Kuan Chen (Infervision, China) | [Q-009-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-009-A01.docx) |
| 10.17 | Dental diagnostics and digital dentistry (TG-Dental) | Falk Schwendicke and Joachim Krois (Charité Berlin, Germany); Tarry Singh (deepkapha.ai, Netherlands) | [Q-010-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-010-A01.docx) |
| 10.18 | Falsified Medicine (TG-FakeMed) | Franck Verzefé (TrueSpec-Africa, DRC) | [Q-011-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-011-A01.docx) |
| 10.19 | Primary and secondary diabetes prediction (TG-Diabetes) | Andrés Valdivieso (Anastasia.ai, Chile) | [Q-024-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-024-A01.docx) |
| 10.20 | AI for endoscopy (TG-Endoscopy) | Jianrong Wu (Tencent Healthcare, China) | [Q-025-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-025-A01.docx) |
| 10.21 | AI for musculoskeletal medicine (TG-MSK) | Peter Grinbergs (EQL, UK), Yura Perov (Independent contributor, UK) | [Q-026-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-026-A01.docx) |
| 10.22 | AI for human reproduction and fertility (TG-Fertility) | Susanna Brandi, Eleonora Lippolis, (Merck KGaA, Darmstadt, Germany) | [Q-027-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-027-A01.docx) |
| 10.23 | AI for traditional medicine (TG-TM) | Saketh Ram Thrigulla (Ministry of Ayush, India) | [Q-029-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-029-A01.docx) |
| 10.24 | AI for point-of care diagnostics (TG-POC) | Nina Linder (University of Helsinki, Finland) | [Q-028-A01](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-Q-028-A01.docx) |

NOTES

\* The document numbers indicated reflect the status as of the end of the e-meeting N. Some links provided are to slide sets; these slide sets are not meant to be the deliverable documents, but rather a status update concerning progress of the respective deliverable. Documents in parenthesis are status updates, not a deliverable text.

\*\* Acting editor

Possible future Deliverables:

| No. | Deliverable | Updated initial draft editor | Reference |
| --- | --- | --- | --- |
| – | Open Code Initiative reference software implementation | Marc Lecoultre (MLlab.AI, Switzerland) | [K-043](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-043.docx) |
| – | Risk management in AI for health | Pat Baird (Philips, USA) | [K-034](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-034.pptx)  |

Initial public version already available:

| No. | Deliverable | Editor(s) | Reference |
| --- | --- | --- | --- |
| [AHG-DT4HE Output 1](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FGAI4H-DT4HE-O-001.pdf) | Guidance on digital technologies for COVID health emergency | Shan Xu (CAICT, China), Ana Riviere-Cinnamond (PAHO)  | [K-042](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-K-042.docx) |
| [TG-Dental Output 1](https://www.itu.int/en/ITU-T/focusgroups/ai4h/Documents/FGAI4H-TG-Dental-O-001.pdf) | Artificial intelligence in dental research: A checklist for authors and reviewers | Falk Schwendicke, Joachim Krois (Charité Berlin, Germany) | [M-004](https://extranet.itu.int/sites/itu-t/focusgroups/ai4h/docs/FGAI4H-M-004.docx) |

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_