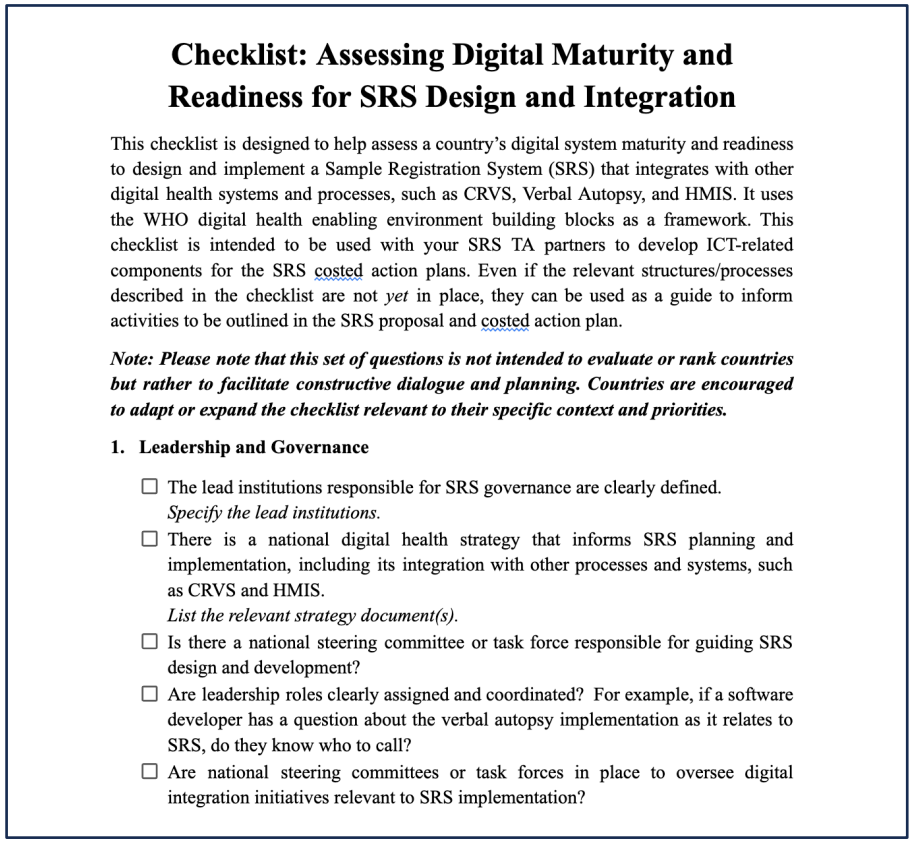
Assessing Digital Maturity and Readiness for SRS Design and Integration

SRS Planning Webinar

4 August 2025

ICT Planning: Introducing a checklist

- A checklist to assess digital system readiness is in development for use in your SRS proposal and costed action plan development
- Anticipated release: September
- Today we will be presenting the content in draft form, and we can circulate draft versions following this meeting



Checklist: Assessing Digital Maturity and Readiness for SRS Design and Integration

This checklist is designed to help assess a country's digital system maturity and readiness to design and implement a Sample Registration System (SRS) that integrates with other digital health systems and processes, such as CRVS, Verbal Autopsy, and HMIS. It uses the WHO digital health enabling environment building blocks as a framework. This checklist is intended to be used with your SRS TA partners to develop ICT-related components for the SRS costed action plans. Even if the relevant structures/processes described in the checklist are not *yet* in place, they can be used as a guide to inform activities to be outlined in the SRS proposal and costed action plan.

Note: Please note that this set of questions is not intended to evaluate or rank countries but rather to facilitate constructive dialogue and planning. Countries are encouraged to adapt or expand the checklist relevant to their specific context and priorities.

1. Leadership and Governance

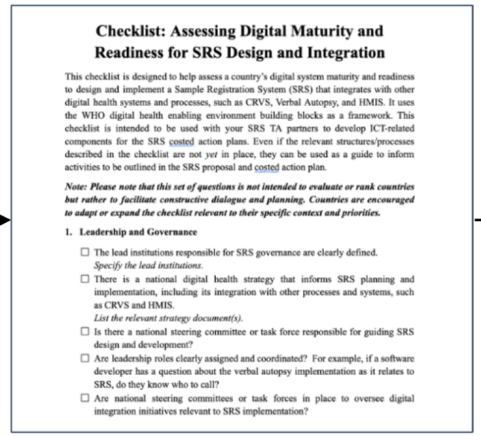
- ☐ The lead institutions responsible for SRS governance are clearly defined.
  Specify the lead institutions.
- ☐ There is a national digital health strategy that informs SRS planning and implementation, including its integration with other processes and systems, such as CRVS and HMIS.
  List the relevant strategy document(s).
- ☐ Is there a national steering committee or task force responsible for guiding SRS design and development?
- ☐ Are leadership roles clearly assigned and coordinated? For example, if a software developer has a question about the verbal autopsy implementation as it relates to SRS, do they know who to call?
- ☐ Are national steering committees or task forces in place to oversee digital integration initiatives relevant to SRS implementation?

Intended Workflow

SRS Planning Grant Team

TA Partner

Tools & Frameworks



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Completed ICT Checklist

ICT Sections for SRS Proposal & Costed Action Plan

ICT TA, as needed

The checklist…

IS

- a set of guiding questions that should be considered when planning for SRS ICT.
- a resource to you and your TA partners as you complete SRS planning grant activities.
- available in draft form.

IS NOT

- a prescriptive definition of how SRS ICT should be planned and designed.
- a method to evaluate or rank countries against each other, or to determine the ultimate success of a country's SRS proposal.
- required.

Checklist Sections

1. Leadership and Governance
2. Strategy and Investment
3. Services and Applications
4. Standards and Interoperability
5. Infrastructure
6. Legislation, Policy, and Compliance
7. Workforce

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2. Strategy and Investment

- Are SRS costed action plans aligned with long-term national goals for mortality surveillance?
- Is there a dedicated budget for ICT-related activities proposed in the SRS costed action plan, both for the initial development/launch and follow-on sustainment/maintenance?
- Are there coordination mechanisms between the donor, partners, and government to support the design and development of the SRS platform and infrastructure?
- Can any existing or planned digital health innovations support donor and government coordination? E.g., could using a specific existing platform in your country lead to further funding or better relationships across partners?
- What risks exist for fragmentation or duplication with existing digital systems relevant to SRS implementation?

3. Services and Applications

- Are CRVS, HMIS, verbal autopsy, and/or any other relevant systems already digitized? Partially digitized? If yes, what tools are already in use to support these processes?
- Is there a functional digital registration platform in use for births and deaths?
- Do existing facility and community reporting tools share data across platforms (e.g., VA to CRVS, CRVS to HMIS, etc.)? If yes, which platforms are already in use to support these processes?
- Does a national data warehouse exist to house digital health information?
- Are there systems or platforms the country aims to adopt or adopt to support SRS implementation (e.g., proprietary, open-source, adaptation of existing systems)?
- What are the use cases and who are the target users of the SRS?
- What data services and analytical tools will the SRS platform offer?
- Will the SRS system be responsive, user-friendly, and accessible to non-technical users?

4. Standards and Interoperability

- Are data standards (e.g., ICD, HL7 FHIR) implemented across digital health platforms, or is there a strategy for such implementation? If yes, which standards and what platforms?
- If a national health data warehouse exists, are interoperability frameworks in place to link it with the SRS? If yes, which frameworks?
- Are APIs or integration middleware available and functional between platforms (e.g., DHIS2, OpenCRVS, etc.)? If yes, which middleware and what platforms?
- Will the SRS align with existing interoperability frameworks (e.g., HL7 FHIR, OpenHIE etc.)? If yes, which frameworks?
- Should the SRS platform exchange data with other systems such as CRVS, HMIS, etc.? If yes, which systems?
- How will metadata and the data dictionary be maintained and shared to ensure consistency?
- Will API or standards-based reporting interfaces be built into the SRS?

5. Infrastructure

- Will SRS data collection be fully digital (e.g., tablets, phones) or hybrid (digital and paper)?
- Do national and subnational offices have stable internet and electricity for digital operations?
- Are devices (e.g., tablets, biometric kits) available for field teams in SRS and CRVS field teams?
- How will SRS data be stored (e.g., government cloud, secure servers etc)?
- How will the SRS program ensure a secure and resilient hosting environment for digital health systems? Detail the plans for this environment.

6. Legislation, Policy, and Compliance

- Are there legal provisions supporting digital data collection and inter-agency data sharing?
- Are there existing data sharing and retention policies that apply to SRS?
- Do national laws support verbal autopsy and community death reporting?
- Are privacy and data protection regulations in place and enforced for digital health systems?
- How will death reports/notifications, verbal autopsy and cause of death data be handled legally and ethically?

7. Workforce

- What roles are needed to operate and sustain the SRS (e.g., statistician, IT support, analyst, data collectors)
- Is there an adequately trained workforce to operate and maintain digital systems at all levels?
- Do staff receive regular training on digital tools, privacy, and interoperability?
- Are IT support and troubleshooting teams available?

Frameworks for Gathering Information

#	Checklist Section	Section Summary	Potential Tools & Frameworks to Gather Information
1	Leadership and Governance	National digital health vision, coordination of SRS, CRVS, and HMIS institutions	• Principles for Digital Development – Design with the user • WHO Digital Implementation Investment Guide – Governance
2	Strategy and Investment	Budgeting, alignment with health goals, and donor coordination	• MAPS Toolkit – Financial Health & Strategic Engagement • WHO Digital Health Strategy
3	Services and Applications	Existence of digital CRVS and HMIS platforms, SRS data use cases, and system linkages	• WHO SMART Guidelines (DAKs) – Functional requirements • Digital Health Building Blocks – Applications
4	Standards and Interoperability	Use of ICD-10, HL7 FHIR, API standards, data sharing protocols	• WHO SMART Guidelines – DAKs • WHO Interoperability Toolkit
5	Infrastructure	Devices, connectivity, server infrastructure, and power backups	• TOE Framework – Technology & Environment • World Bank Digital Health Assessment Toolkit – Infrastructure
6	Legislation, Policy, Compliance	Privacy laws, digital ID legality, and verbal autopsy consent	• Health Information Governance Framework • PAHO AI Readiness Toolkit – Ethical and legal frameworks
7	Workforce	Training availability, IT support staff, and digital literacy	• e-Health Implementation Toolkit (e-HIT) – Workforce Readiness • MAPS Toolkit – Training and Support

Other Forthcoming ICT Resources

- September 2025: Revised and finalized version of this ICT checklist

- Q4 2025: SRS ICT “Playbook” that will
  - incorporate and integrate existing ICT resources
  - add case studies based on existing country experiences
  - provide implementation-focused tools and templates

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When in doubt, reach out to your TA partners, and they can connect us!