# The CORE Pilot

### 1. The Problem NRC Needs to Solve

NRC's programme implementation depends on timely, accurate, and secure information about who we assist, what services they receive, and how their feedback and referrals are managed.

However, as outlined in the <u>CORE V2 Problem Tree (31 Oct 2024</u>), the organisation currently faces a number of systemic challenges. These issues could collectively undermine NRC's accountability to participants and donors, increase risks to compliance, and slow down programme delivery.

## 2. Evolution of the CORE Project

Since 2015, NRC has pursued several initiatives to develop a unified digital system for programme data management. Early efforts oscillated between "build" and "buy", bespoke versus global solutions, and varying degrees of collaboration between ICT and programme sections.

By 2022, after repeated fragmentation and limited adoption, NRC relaunched CORE under the Global Programme Section with a dedicated project manager, new governance structures, and a new ambition to solve the systemic challenges facing our digital systems for programmes.

This re-launch was grounded in extensive consultations with COs and technical experts, identifying a set of functional and technical requirements that existing off-the-shelf systems could not fully meet. The conclusion under the approved <u>PiD (2023)</u> was that NRC should develop its own in-house digital solution, combining:

- A common participant database shared across Core Competencies (CCs).
- Standardised workflows reflecting NRC's programme cycle.
- Integration points (APIs) with other systems (GORS, DCH, Kobli, Unit 4, etc.).
- Strong data protection and access controls, ensuring compliance with GDPR and humanitarian data-protection principles.

The project adopted what was termed a modular-monolith approach: one platform encompassing multiple functions (modules) but built with flexibility for future modularisation. This would, in theory, provide seamless integration for users while keeping NRC in full control of its data model and roadmap.

# 3. Scope and Scale

The full vision of CORE, described in the <u>Project Initiation Document (PID, Gate 2 2023)</u> — included multiple modules, covering participant registration, referrals, service management, CFM, CRM, expense tracking, GIS, APIs, and GDPR self-management.

However, following global shocks and budget reductions, only a limited subset of Version 2 has been developed to a 'Minimum Viable Product' and will be piloted focusing on:

- Registration,
- Service Tracking,
- CFM (CRM backend for effective management of the data produced by systems such as DCH)

Offline functionality, automated GORS integration, dashboards, and some advanced modules have been deferred to the non-MVP version, to be prioritized given organisational & sector realities. Finalising these developments to achieve the full intended version would require additional investment in 2026.

Despite the reduced scope, the project has generated valuable global assets:

- A standardised data model for programme activities and case management.
- A library of harmonised forms and taxonomies aligned to the global data dictionary, linked to our MEAL framework.
- An Information Management Handbook to support CO digitalisation more broadly.

These deliverables & the findings of the pilot will greatly add to the foundational elements of NRC's Digital Ecosystem for Registration, Service Tracking and the management of data from CFM front end systems, regardless of CORE's future implementation.

### 4. Architectural Context

The CORE project exists within a broader organisational discussion about how NRC should structure its digital architecture, specifically how to balance:

- Reducing technical complexity ensuring systems are maintainable, scalable, and affordable.
- Managing technological diversity limiting the number of different systems and frameworks in use.

From a Solutions Architecture perspective, a single system deployed across dozens of COs may reduce diversity but increase complexity, because it centralises dependency, can create heavy maintenance requirements, and requires strong change management capacity in NRC's contexts with uneven digital maturity.

Conversely, at the other extreme, a modular ecosystem of interoperable applications per CO, each focusing on one function (e.g., DCH for communication, GORS for reporting, Kobli for ICLA case management, bespoke CO applications), may increase the overall diversity but reduce overall complexity by keeping systems small, replaceable, and loosely coupled.

The pilot therefore not only tests whether CORE functions technically and programmatically, but also to what extent it aligns with NRC's draft Digital Architecture Principles, which prioritise:

- High coherence, low coupling: Each tool should connect easily to others and perform its role well within the ecosystem
- Interoperability over monolithic-ERP-style implementation: Prioritise systems that can work together, not a singular system that tries to do it all
- Breadth-first delivery: Focus on making the overall process work first, only then adding extra features & improvements; and

• Time-bounded, maintainable deployments that deliver value quickly rather than chasing long-term perfection.

# 5. The 2025 Pilot and Gating Point

The 2025 pilot aims to validate CORE against a defined set of technical, operational, and organisational criteria.

#### The pilot will assess:

- 1. Whether the system functions technically and securely across real CO environments.
- 2. Whether it demonstrates measurable efficiency and data-quality gain as per the ToC.
- 3. Whether COs can maintain and govern the system with realistic resourcing.
- 4. Whether the architecture is sustainable, modular, and within reasonable bounds of compliance with NRC's principles.
- 5. Whether CORE provides superior added value, with respect to the above questions, to COs compared with lighter or off-the-shelf alternatives.

At the end of the pilot, NRC will make a strategic decision based on these criteria and the accompanying learning questions.

Regardless of answer to these questions. The written report will provide comprehensive recommendations for a global approach to registration, service tracking and CFM data management.

This may include managing the requisite tech diversity and complexity in the most effective way across contexts and over time. This means a framework for: what technical and non-technical solutions, where and when within the reality of the Sector, NRC and its operations.

### 6. The Criteria

Due to the complexity of the problems that we are trying to solve for an organisation that has and continues to go through volatile changes – we must have a broad set of criteria that are measurable and interrogate the questions in the previous 'Pilot' section.

### 1. The system functions technically and is safe

Comparison	Not directly comparable – this is a baseline requirement for any digital system.	
Criteria		
Indicators	Quantitative:	
	Uptime meets acceptable standards	
	High-severity bugs unresolved at closure.	
	No critical data-protection incidents.	
	Page load in low-bandwidth conditions.	
	Qualitative:	

	Pilot users agree the system is stable and usable.	
	Users report ease of navigation and workflow completion.	
	Clear data protection processes	
	User management understood.	
	Data validation and audit trails function.	
Means of	Technical performance monitoring reports.	
Verification	Penetration and security testing logs.	
	Incident reports and DPIA documentation.	
	End-user feedback with a usability survey.	
	• ICT assessment of compliance with NRC digital standards.	
Effect on	<b>Green:</b> CORE functions reliably and securely → Proceed to rest of the assessment	
Decision	<b>Blue:</b> Minor fixable technical issues or isolated usability problems → Proceed	
	conditionally; implement remedial investments, which should be costed.	
	<b>Red:</b> System instability, unresolved bugs, or data protection risks → Discontinue or	
	re-scope project; alternative solutions identified.	

## 2. Demonstrated efficiency gains for CO processes

Comparison Criteria	Yes. Efficiency gains should be compared with off-the-shelf or local tools (e.g.	
	ActivityInfo, ESPO CRM, Kobo). The key is whether CORE yields unique or	
	greater gains versus other digitalisation efforts.	
Indicators	Quantitative:	
	Improved time to complete registration and service-tracking workflows	
	compared to Excel baseline.	
	Reduction in duplicate participant records.	
	Reduction in errors in tracking services to communities	
	• Improvement in timeliness of accessing data to be reported to GORS.	
	Qualitative:	
	Users perceive CORE as reducing workload and administrative duplication	
	Managers report faster decision-making through access to real-time data.	
Means of	Before/after process mapping and post hoc interview	
Verification	User feedback surveys.	
	• Analytics from CORE usage logs (time per transaction, duplicate detection).	
	Comparative analysis with other tools in use in pilot COs.	
Effect on Decision	<b>Green:</b> Demonstrated, measurable efficiency gains → System viable for global	
	rollout.	
	Blue: Mixed or context-specific gains; benefits achievable with adaptation →	
	Continue pilot or modular rollout.	
	<b>Red:</b> No efficiency gains or equal gains achievable with simpler tools →	
	Discontinue or prioritise alternative solutions.	

## 3. CO ability to maintain and govern CORE implementation

Comparison	Yes. All digital systems require a baseline, but CORE's specific resource and skill	
Criteria	burden should be compared against other systems.	

Indicators	Quantitative:	
	COs able to manage configuration and user profiles without HQ support	
	Average number of help-desk tickets is manageable	
	Cost of ongoing support per CO below agreed threshold.	
	Qualitative:	
	• Staff express confidence in troubleshooting, training, and version updates.	
	Digital literacy and connectivity sufficient for daily use.	
Means of	Pilot cost tracking and staff-time review.	
Verification	Training attendance logs and post-training evaluation.	
	Helpdesk statistics and ticket resolution times.	
	CO interviews on readiness and sustainability.	
Effect on	<b>Green:</b> Pilot COs maintain CORE independently; manageable cost → System	
Decision	could scale globally.	
	<b>Blue:</b> Only digitally mature COs sustain CORE → Retain CORE as one approved	
	option in a mixed ecosystem.	
	Red: Heavy HO or vendor dependency, high cost, or low capacity (relative to other	
	tools) → Discontinue or redesign as lighter modular tool.	

## 4. Relevance and added value for COs

Comparison	Yes. Compare whether similar improvements in data quality, deduplication, and	
Criteria	reporting could be achieved through other platforms or through stronger	
	governance of existing tools.	
Indicators	Quantitative:	
	Participant records pass validation and deduplication checks.	
	Projects able to link services to individual participants.	
	Management report improved access to data and analysis.	
	Qualitative:	
	COs perceive CORE as more comprehensive and reliable than prior tools.	
	Integrations with DCH work as intended.	
	Flexibility exists to adapt to local workflows without breaking standards.	
Means of	Data-quality audit and system logs.	
Verification	Usage analytics (records created, services tracked).	
	CO/HO management feedback.	
	Comparison tables with other tools (ActivityInfo, ESPO CRM).	
Effect on	<b>Green:</b> CORE delivers clear added value across functions → Prioritise scale-up.	
Decision	<b>Blue:</b> Partial or uneven added value; key modules strong → Modular continuation of	
	valuable components.	
	<b>Red:</b> No unique value compared to other systems → Discontinue and apply CORE's	
	data model/governance lessons to less intensive alternatives.	

## 5. Sustainability and architectural alignment

Comparison	<b>Yes</b> . Sustainability and architecture should be benchmarked against other NRC &	
Criteria	sector-wide systems in terms of total cost of ownership, scalability, and alignment	
	with NRC's architecture principles: reduce technical complexity, manage	
	technological diversity, ensure interoperability.	

Indicators	Quantitative:		
	Confirmed appropriate funding post pilot		
	Average deployment time per CO meets acceptable standard		
	• CO-level operational cost below target ceiling (e.g. NOK x per year).		
	Qualitative:		
	Architecture review confirms high coherence, low coupling, and interoperability		
	readiness.		
	• Clear governance model established (roles, roadmap ownership, release cycles).		
Means of	Financial and cost-projection.		
Verification	• ICT architecture review and compliance assessment.		
	Governance documentation and resource plans.		
	Comparative TCO review with other digital tools.		
Effect on	<b>Green</b> : CORE sustainable and aligned with architecture principles → Scale up or		
Decision	maintain as core NRC platform.		
	Blue: Sustainable for limited rollout or modular use; complexity manageable →		
	Proceed with hybrid/federated model.		
	<b>Red</b> : High complexity, weak governance, or unfunded model → Discontinue in-house		
	development; move to interoperable multi-solution approach.		

### 7. How the results will be used

#### All greens:

If all of the criteria are Green – this is a signal that the system:

- 1. Functions technically and securely across real CO environments.
- 2. Demonstrates measurable efficiency and data-quality gain as per the ToC.
- 3. Allows COs to maintain and govern the system with realistic resourcing.
- 4. Is sustainable, modular, and within reasonable bounds of compliance with NRC's architectural principles.
- 5. Provides superior added value compared with other open-source or off-the-shelf alternative (linked to the above points)

This would mean that this is the course of action that we should take as is the best option for NRC, is feasible in the long term and is a high-quality solution to solve Participant Registration, Service tracking and CFM. It is supported by a full business case, roll-out strategy and funding plan.

#### Any red at all:

If there are any red at all, this means that CORE's current trajectory means that it is not feasible post pilot, in the long term or both.

If this is the case, then GPS will have to identify another solution or set of solutions that is 'good enough'.

The full write up of the evaluation will allow management to understand the restrictions we are bound by (E.G. capacity in countries, money to invest/support), when recommended any new solution(s).

We would take all the previously verified work around the taxonomy, data models and governance documents that are relevant to moving forward and applying them to new solutions.

#### A mix of Green and Blue:

This indicates that while some of the criteria are fully met, there needs to be adjustments to the approach to make it appropriate for NRC.

A cost–benefit and effort analysis will be conducted to determine whether additional investment could bring the blue criteria to green, and whether a selection of options would better serve NRC's global needs.

The outcome could be a recommendation for a mixed deployment model, where some contexts implement CORE, while others use alternative integrated systems (e.g, NRC Collect, Espo CRM, ActivityInfo).

If the scores are predominantly blue, this will probably highlight that CORE Is only viable in a select few contexts and could be viable for ambitious countries as an option if it is a sustainable for the organisation.

#### **Summary**

Interpretation	Resulting Action	Implication for NRC
All Green	Scale-up CORE globally	CORE becomes the central system for registration,
		service tracking, and CFM. Global support and
		governance established.
Mixed	Evaluate Hybrid & Modular	Assess which modules or contexts are suitable;
Green/Blue	Models	may lead to modular rollout or federated ecosystem
		approach.
Predominantly	CORE as one option for high-	Introduce contextual digital roadmaps; align lighter
Blue	capacity COs (if	systems to shared data model.
	economical)	
Contains a Red	Do not proceed with CORE	Retain data standards and workflows; adopt other
	as global solution	digital tools for coverage.