CITIZENSHIP, DATA PRIVACY AND BIOMETRICS

Tying the digital knots
Social protection in practice

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Identity for Social Protection

BACKGROUND

HSNP

Department for International Development

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Nigeria

Department for International Development

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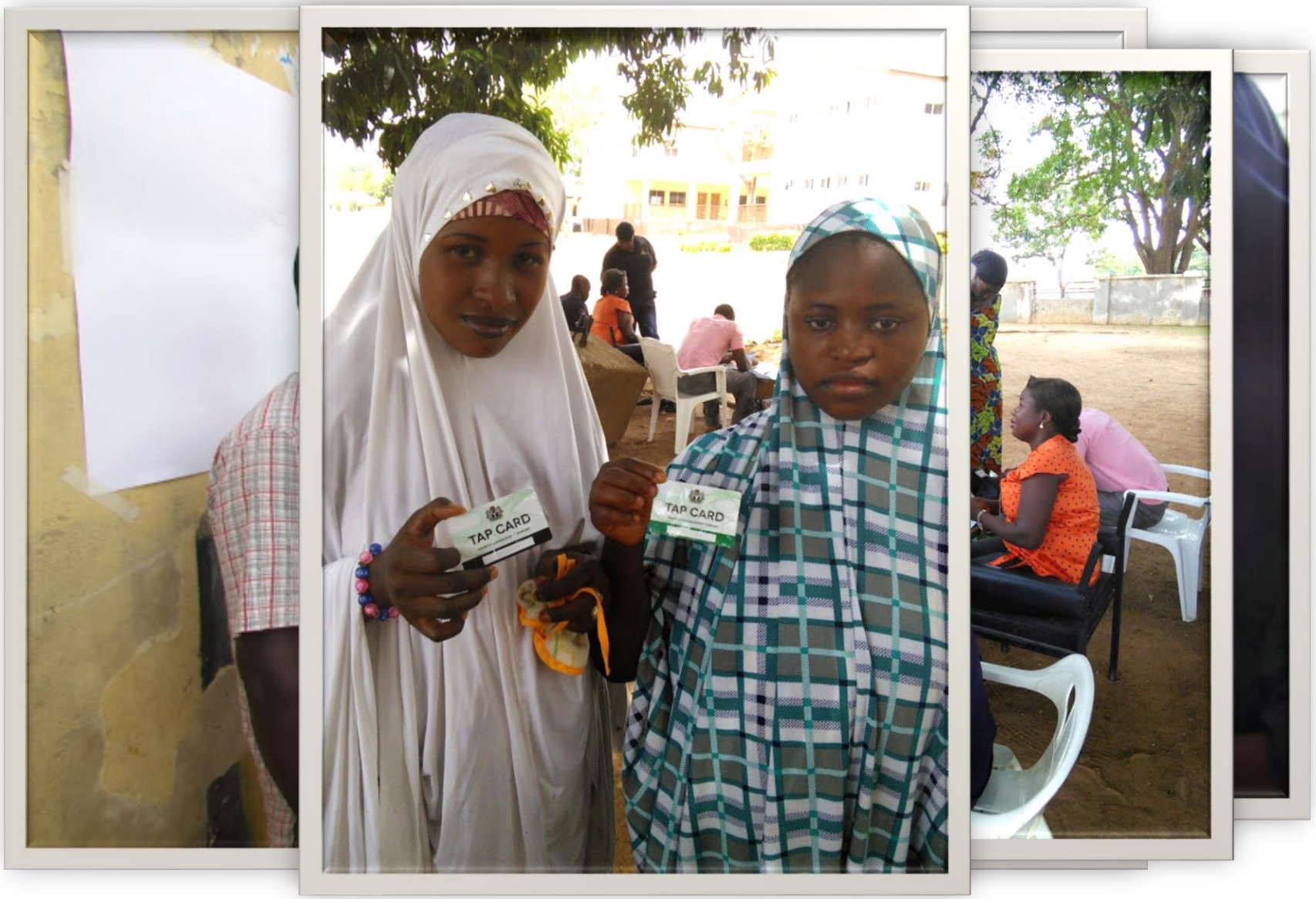

Financial Services in Somalia

Department for International Development

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Lessons

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- Identity underpins everything
- Adaptability is essential
- Conventional documentation may be optional
- Anonymity/untrackability risks creating ghettos

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POTENTIAL SOLUTIONS: BIOMETRICS

What is a Biometric?

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- Quality is related to the number of points
- Unlike the fingerprint, the biometric profile is not unique
- There are also questions of biometric suitability, centralisation, and personal and cultural anxiety

Identification Vs. Authentication

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The source of much misuse of biometrics.

Identification: in which the customer is identified for the purpose of onboarding, using for example a face biometric.

- Largely infeasible using current technologies.

Authentication, or Verification: Where an existing customer has previously been onboarded and issued with a new digital identity which includes a biometric, for authentication.

- Used to tie the person requesting service back to the original registration.
- Relatively straightforward.

Biometrics and Data Protection

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Trend towards storing biometrics in a centralized database gives rise to concerns

- What about compromise?
- Replay attacks?

Part of broader concerns about centralization; surveillance, tracking, impersonation, etc.

Better: leave the data under the beneficiary's control

- Local
- Remote, with the (only) keys with the beneficiary

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POTENTIAL SOLUTIONS: BLOCKCHAIN

Blockchain for Identity

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Huge potential:

- Self-asserted, “Best Guess” or Real IDs (BYOC) all supported
- (In theory) puts control in the hands of the beneficiary

But there are questions to be answered:

- Where are the keys?
- Where is the identity data?
- Is the beneficiary really in control?

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HOW TO ACHIEVE DATA PRIVACY

Achieving Data Privacy

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Policy / Legislation

- Whose privacy? The individual's, or the Government's?
- Meaningless without well-funded and politically-supported enforcement

Cryptography

- Like biometrics, difficult to do well
- Who has access to the keys?
- Need a continuous review program

Underpinned by Cybersecurity

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Policy and practice need to be in place:

- Mobile phones and networks ARE NOT inherently secure
  - Watch out for GSM encryption, USSD, SS7, IMSI Catchers, etc
- Biggest threat is people who have access to your internal systems
  - Know who your staff are, use encryption everywhere, use 2FA for access, know who your visitors are, don't forget physical security, etc, etc.

What Type of Digital Identity?

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Type	Strengths/Weaknesses
Real identity	Difficult to establish with limited documentation Preferred by financial sector
Self-Asserted/Assigned identity	Easy/ier to establish May be difficult to find an FSP that will accept it
Anonymised identity (linked or unlinked)	Makes tracking impossible May make migration to conventional financial sector difficult; Governments and regulators deeply suspicious

Recommended Approach

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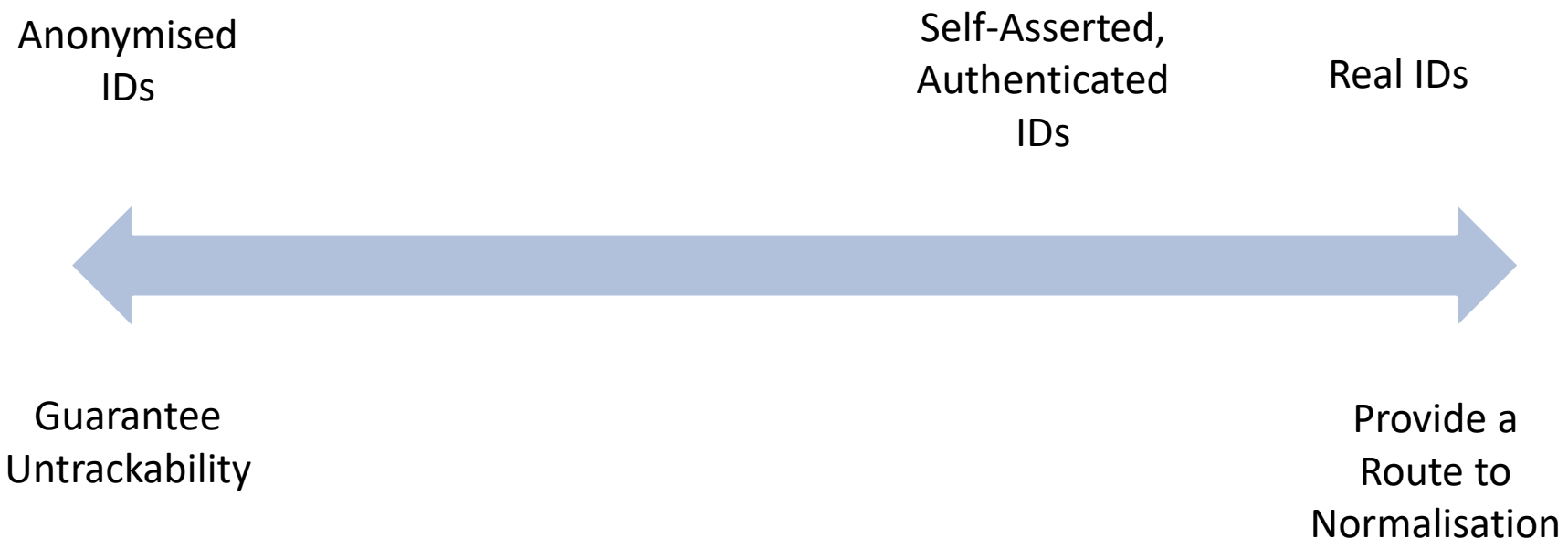
Usage depends on what you want to achieve.



Unique Identifiers

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Inherently useful to multi-agency social protection

- Supports better targeting;
- Reduce per-agency data collection costs;
- Improve the “freshness” of data;
- Enhance data quality through cross-checks and validation, including ensuring de-duplication;
- Enhance cross-program responsiveness to life cycle risks;
- Improves the accuracy of M&E;
- Can help with identifying fraud and double dipping.

Unique Identifiers

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But beneficiary data must be encrypted; so how is it accessed, and how are the keys kept secret?

- "Beneficiary present"?
- Beneficiary giving persistent access?
- Agency holding the keys; maybe derived keys – but who has access? Key sharing across agencies?
  - Implies a consistent/standardized cybersecurity infrastructure across agencies
  - Create a multi-agency, authenticated digital ID that has access to the data?

Unique Identifier: Implications

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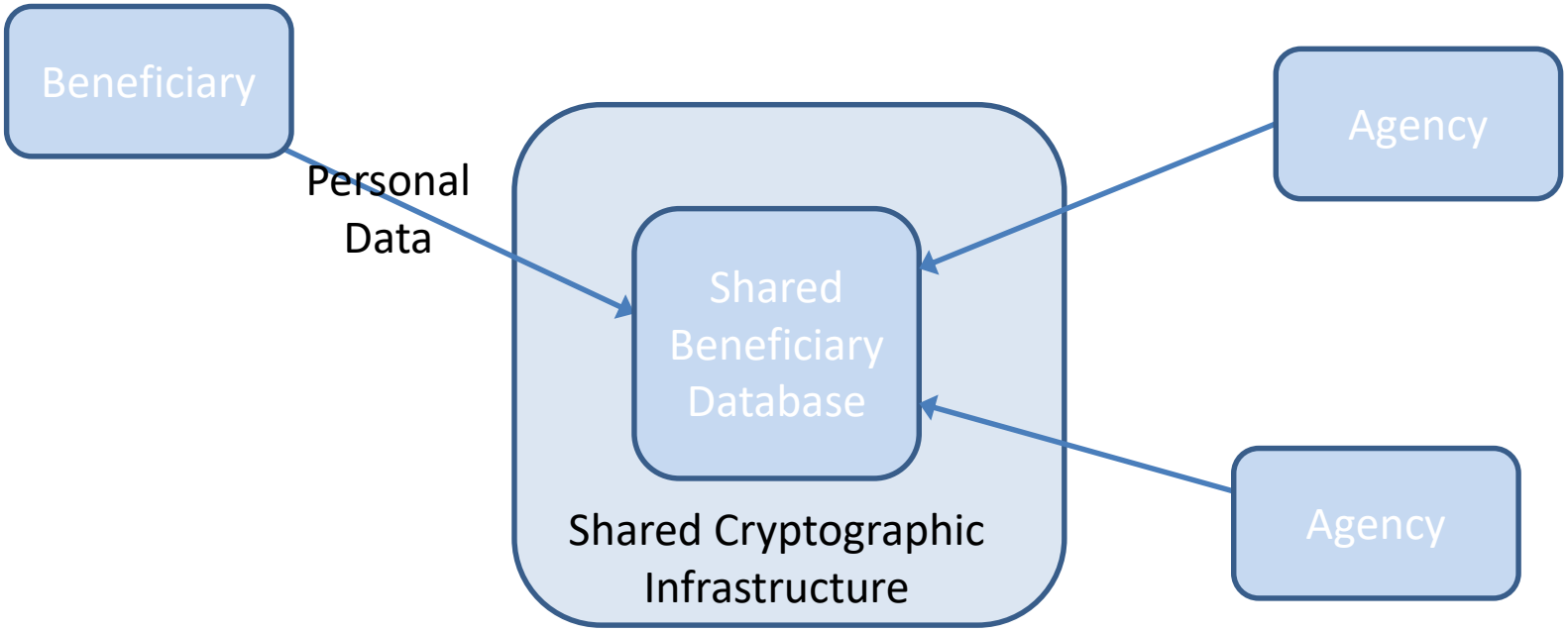

Implies a set of cross-agency policies and standards to protect the beneficiary's data

- Raises questions of liability and beneficiary loss of control
- Needs a pilot

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THANK YOU

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