

tNN

RELAYS





GENERALLY

- 1. Are **specialized** message broadcasters and document distributors.
- 2. Each Relay sends directly to only a few hundred or so **NGUs** and maybe a hundred or so **other relays**.
- 3. Handle only **high quality** messages.
- 4. Are needed to provide useful **discipline** and **traceability** to message transmission.
- 5. Facilitate communication with **large numbers** of NGUs.





ARE USED TO:

- 1. **Broadcast** Information Dispatches to election districts.
- 2. Send **issue-solution proposals** to small, random subsets of NGUs within an election district.
- 3. Send **tentative policy mandates** to large, random subsets of NGUs within an election district for statistically accurate and reliable approval.
- 4. **Process Policy Directives** which have been validated by an election district and are ready to be delivered to government representatives.





FACILITATE BROADCAST

- 1. If a NGU or IG (Initial Group of NGUs) wishes to broadcast an Information Dispatch it has composed to an election district, it will **submit it** to a relay.
- 2. The relay will randomly select a 'validation set' of NGUs in the district to examine the submitted ID.
- 3. If that validation set **judges it worthy** of widespread distribution in the district, it so advises the Relay.
- 4. If validated, the submission **is broadcast** by the Relay to the specified district.





Send ISSUE-SOLUTION Proposals

- 1. If an NGU (or IG) wishes to send an **issue-solution proposal** to a small, random subset of NGUs within an election district, it submits it to a Relay and informs the relay of how many NGUs should be in that subset.
- 2. The Relay **examines the proposal** for proper format and relevancy to the district.
- 3. If the document has proper format and is relevant, the Relay goes to a Registry for that district, **randomly picks** the NGUs, then sends the proposal to them.





Send TENTATIVE POLICY MANDATES

- 1. If an IG wishes to send a **tentative policy mandate** to a large, random subset of NGUs within an election district for statistically accurate and reliable approval, it submits that tentative mandate to a Relay.
- 2. The Relay **examines** the mandate for the required information and relevancy of the content.
- 3. If it passes examination, the Relay randomly selects the appropriate number of NGUs in the district, then **sends** the tentative mandate to them for approval.





Process POLICY DIRECTIVES

- 1. After an issue-solution has been turned into a policy mandate ready for delivery to a government official, it has to be delivered by a formal process (a **Mandate Delivery Action**) performed by a Relay.
- 2. That detailed process is described in the book: *the Neighborhoods Network*, chapter 5 on Networking.
- 3. In that process the Relay examines the document, has it checked by a validation group of NGUs, delivers it to the official for his or her verification, and records the transaction into the tNN data base (the NIN).



EACH RELAY HAS LIMITED CAPACITY

- 1. Each relay can perhaps communicate with 100 Neighborhoods and 100 other Relays.
- 2. This is adequate to cover **10,000** neighborhoods (corresponding to perhaps 5,000,000 people)
- 3. To cover really large election districts, one relay can send to 100 relays each of which can distribute the message to 100 more relays each of which distributes to 100 neighborhoods. This can distribute a message to 100 x 100 x 100 x 500 persons which is **500,000,000 people**. (An entire nation!).

8



tNN

Not All MESSAGES are HANDLED by RELAYS

- 1. Relays are **NOT intended** to handle messages between collaborating neighborhoods even if they are large distances apart. Collaborating neighborhoods use the Relays to select random neighborhoods, but then their work groups communicate directly.
- 2. **Relays are intended** to handle well-developed proposals as messages (to large numbers of neighborhoods covering large electoral districts) for acceptance or denial.





ALSO HANDLE OTHER HIGH QUALITY or URGENT MESSAGES

- 1. Threats to the tNN requiring immediate action.
- 2. Well-considered, **potential** (not yet approved) **mandates** for elected officials.
- 3. **News Items** (matters pertaining to governance or to the operation of tNN).





CAN'T EACH NEIGHBORHOOD DO THIS?

- 1. NGUs could perform relay functions among small, local subsets of themselves.
- 2. When addressing larger governance districts, polling and collaboration becomes impractical without relays.
- 3. Some functions, such as **broadcast** and **delivering mandates**, require special discipline which relays provide.





IN GENERAL

- 1. **Duplication** of Relays is OK, and desirable.
- 2. Relays covering large election districts will **use** relays covering the smaller, constituent districts.
- 3. Neighborhoods will want to **monitor** the relays to ensure accuracy and thoroughness of coverage.
- 4. Neighborhoods will randomly **test relay communications** to ensure the function is correctly performed.





END of PRESENTATION