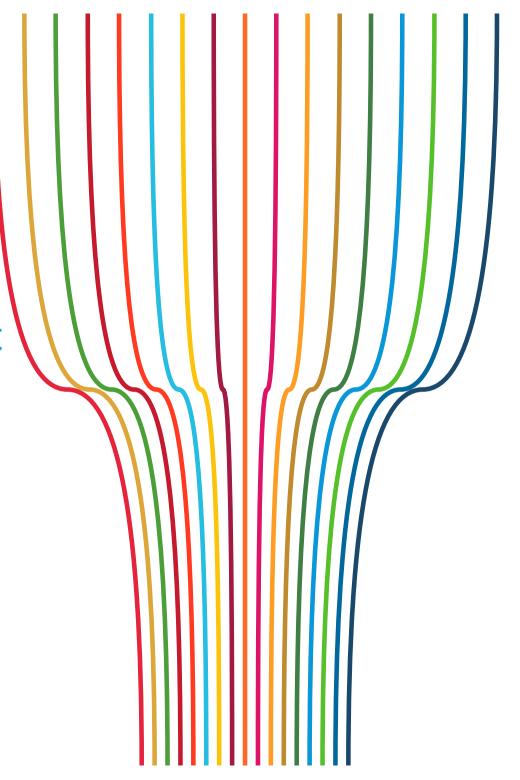
UN/CEFACT

Global Trust Registry Project

GRID Explainer



This is the logical model for the UN Global Registrar Information Directory, aka: "the GRID"

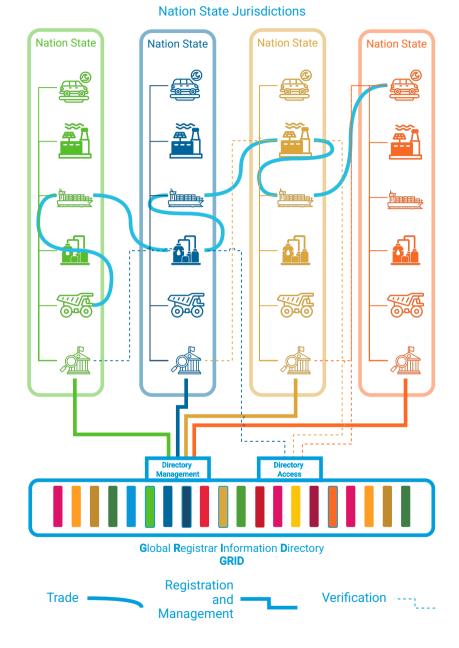
It probably looks quite complex. Over the next few slides we'll introduce each element and explain what it means.

As well as describing how the model works, we'll also explain what GRID is meant to do and why we think that is important

Trade
Participants are
based in
Jurisdictions
(countries /
"nation-states")

And register with Authoritative Registrars

Who register in the UN GRID



Supply Chains are often long and complex

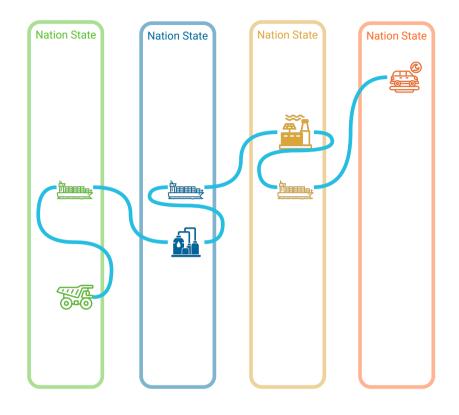
This is a simple representation of a supply chain with a number of participants producing and shipping goods (products).

Each participant is either a supplier or a buyer, or both.



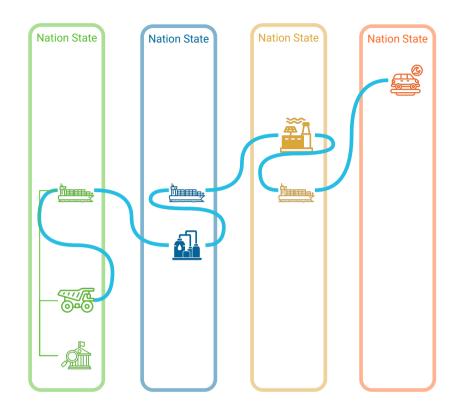
Legal Trade occurs between participants registered in Nation States

Each participant in a legal trade transaction will be registered in a nation-state



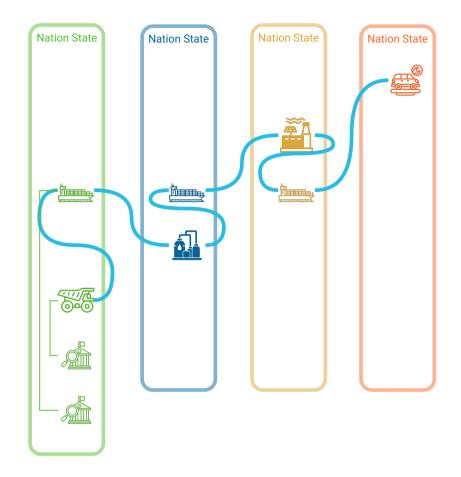
Registration is with "Authoritative Registrars"

Authoritative Registrars are organizations who are recognized as having responsibility and authority by the legal framework of their country.



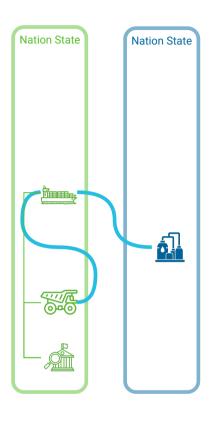
Nation States may have many Registrars

There are often different Registrars for each thing to be registered (land, facilities, organizations, trademarks, etc.), and sometimes there are federated systems of Registrars within one nation state.



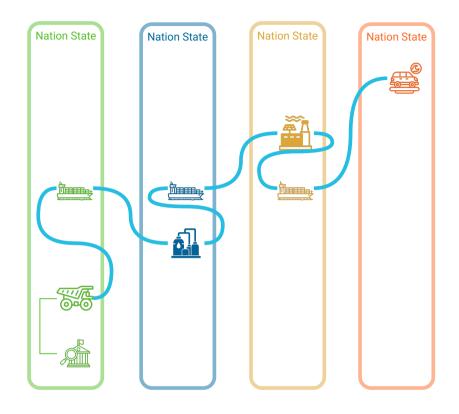
We will show one Registrar per Nation State

This is to make the diagram easier to read (and draw).



We will distinguish between "Registrar" and "Register"

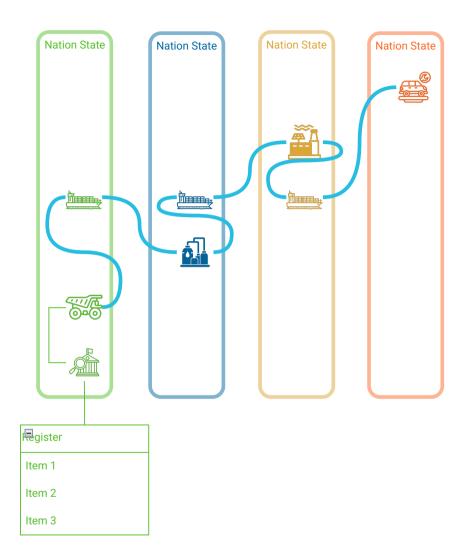
We want to make it clear whether we are talking about the organization responsible for registering something (the **Registrar**), or the thing they are responsible for (the **register**).



We don't show the Registrars register

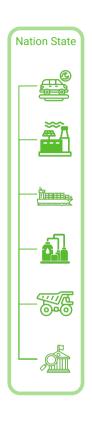
To keep our diagrams simple, we won't show the registers maintained by the Registrars.

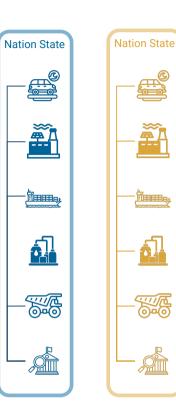
It is important to note that GRID will not replicate the content of a Registrars register.

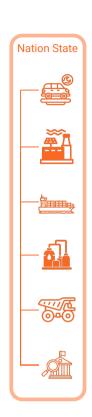


The diagram will use the same pattern of supply chain participants for each Nation State

This is another simplification. Nation
States will vary in the number and
type of entities that they register







Each trade interaction involves product (goods), documentation and value exchange

Most of the documentation exchanged in trade interactions is still paper-based, either physical documents or PDF (electronic representation of physical document)

Documentation will include shipment and commercial details, such as: Bill of lading, Commercial Invoice, Packing List, Certificate of Origin, Shipper's Letter of Instruction etc.



"Who" and "What" are key points to confirm in every trade

The documentation includes claims (assertions) about who the Supplier is and details of the product being shipped



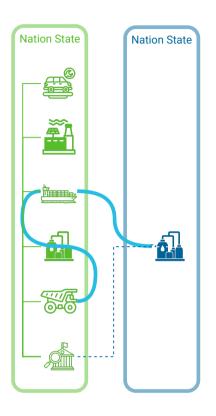
- Name of company and registration details ("Digital Identity Anchor")
- Product description and attributes ("Digital Product Passport")
- Claims about quality and processes (conformance, quality, licenses etc.) - "Digital Conformance Credential"

These are examples of the core verifiable credentials records of the United Nations Transparency Protocol (UNTP).

Documentation needs to be checked

Recipients (buyers / relying parties) will checks supply documentation to see that the shipment meets regulatory requirements and their commercial expectations.

Its not just the supply chain participant that are keen to check things, regulators, border control and tax authorities etc. are also interested.

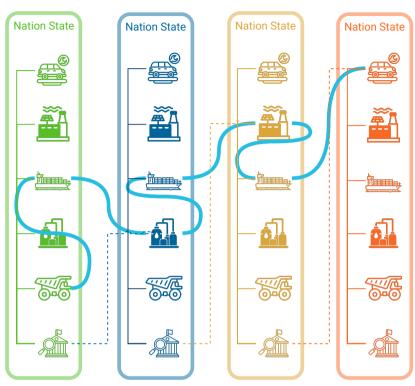


Registration Verification Verification

This is then our simple model of a supply chain

With these pieces in place, we can now draw our four nation state model with participants checking the registration and claim details of their supplier with the authoritative registrar for their supplier in their supplier's jurisdiction.

Nation State Jurisdictions

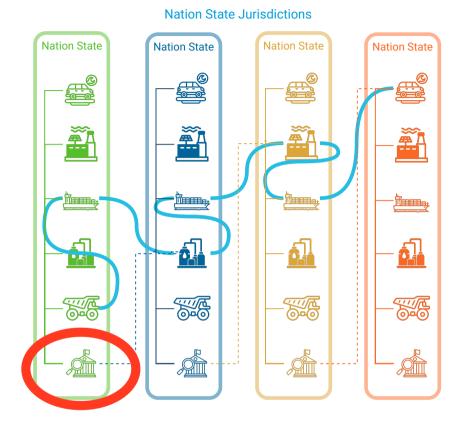


Registration ---- Verification ----

But who says these Registrars are Authoritative?

The value of trade exchanges makes them the target of significant criminal activity. From counterfeit products to false claims and elaborate (but fake) provenance.

Who says that this **is** the authoritative Registrar for a Nation State. What trustworthy source can I use to find out?



Registration Verification ----

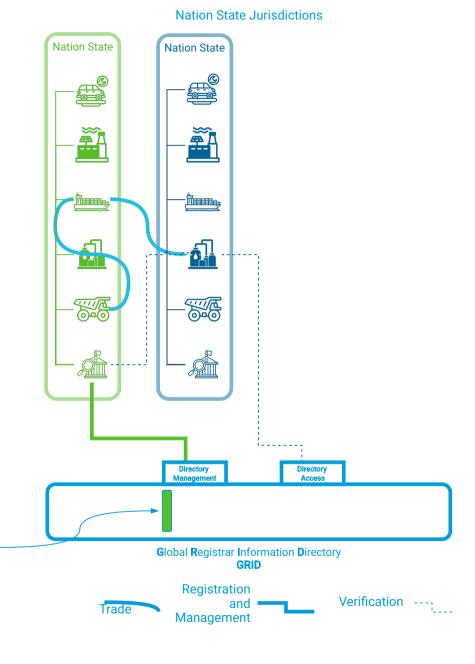
That's why we need the GRID!

The Global Registrar Information Directory will confirm who is the registrar for what items in which country.

Curated and governed by the UN with data self-maintained by the Nation State Registrars, the GRID aims to provide and efficient and trustworthy source of truth.

> Information about this Nation State Registrar's register.

Managed by the Registrar, governed by the GRID



And that gives us the logical model for the **GRID**

Here we have all the previous elements in the one schematic.

Note that this is a **logical** model - the physical implementation of the GRID could be centralized, decentralized and/or distributed.

Trade Participants are based in **Jurisdictions** (countries / "nation-states")

> And register with Authoritative Registrars

Who register in the UN GRID

