Identity Proofing with OpenID Connect

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Use Cases

- Opening a banking account (Anti-Money Laundering)
- Applying for a loan (Anti-Money Laundering)
- Signing up for a mobile subscription (Anti-Terrorism)
- Identification for access to health data
- Qualified electronic signature (eIDAS/electronic IDentification, Authentication and trust Services)

Representation

- needed for
 - User Claim Values
 - Confidence Level (per claim or set of claims)
 - Data about the verification process and the respective identity sources (e.g. id document number)
- supports mixture of verified and unverified claims, e.g. self declared address and verified name
- can be used with: User Info, ID Token, Access Token Introspection
- -> And there needs to be a way to request specific claims to be verified (selective disclosure)

Example

- The RP wants to identity user according to eIDAS assurance level substantial, wich requires the following data
 - Name, Birth Date and Place of Birth, nationality
- User (Max) utilizes KYC data associated with his Online-Banking Account
- Max Meier's identity was verified using his ID Card by the Bank (Sparkasse Musterstadt) according to the German Anti-Money Laundering Law.
- The Bank delegated that verification process to an agency (Deutsche Post).
- RP needs to get an attestation about the whole process for its audit trail.

Approach

- Dedicated composite verified person data claim built from
 - Sub element containing all metadata regarding the verification
 - Another sub element containing the actual user claims
- Additional user claims (e.g. for nationality)

```
"iss":"https://as.sparkasse-musterstadt.de",
"sub":"123456789087632345678",
"aud": "example rp",
"acr": "https://www.yes.com/aal/online banking sca"
"https://www.yes.com/claims/verified person data":{
   "verification":{
      "organization": "Sparkasse Musterstadt",
      "legal context": {
         "country":"DE",
         "regulation": "Geldwäschegesetz"
      "date":"2013-02-21",
      "method": "identity document",
      "identity document": {
         "country":"DE",
         "type":"ID Card",
         "issuer": "Stadt Augsburg",
         "number":"53554554",
         "date of expiry":"2022-04-22",
         "method": "Physical In-Person Proofing (shop)",
         "organization": "Deutsche Post AG",
```

},

```
"claims":{
     "given name": "Max",
     "family name": "Meier",
     "birthdate":"1956-01-28",
     "https://www.yes.com/claims/place of birth":{
        "country":"DE",
        "city": "Musterstadt"
     },
     "https://www.yes.com/claims/nationality":"DE"
  },
"address":{
   "locality": "Maxstadt",
   "postal code":"12344",
   "country":"DE",
   "street": "An der Sanddüne 22"
},
```

Requesting Verified Person Data

```
"userinfo":{
    "https://www.yes.com/claims/verified_person_data":{
        "claims":{
            "given_name":null,
            "family_name":null,
            "birthdate":null,
            "birthdate":null,
            "https://www.yes.com/claims/place_of_birth":null,
            "https://www.yes.com/claims/nationality":null,
            "address":null
        }
}
```