

Standardized DNSSEC-Signed Attestations for Sport

dnsattest.sport

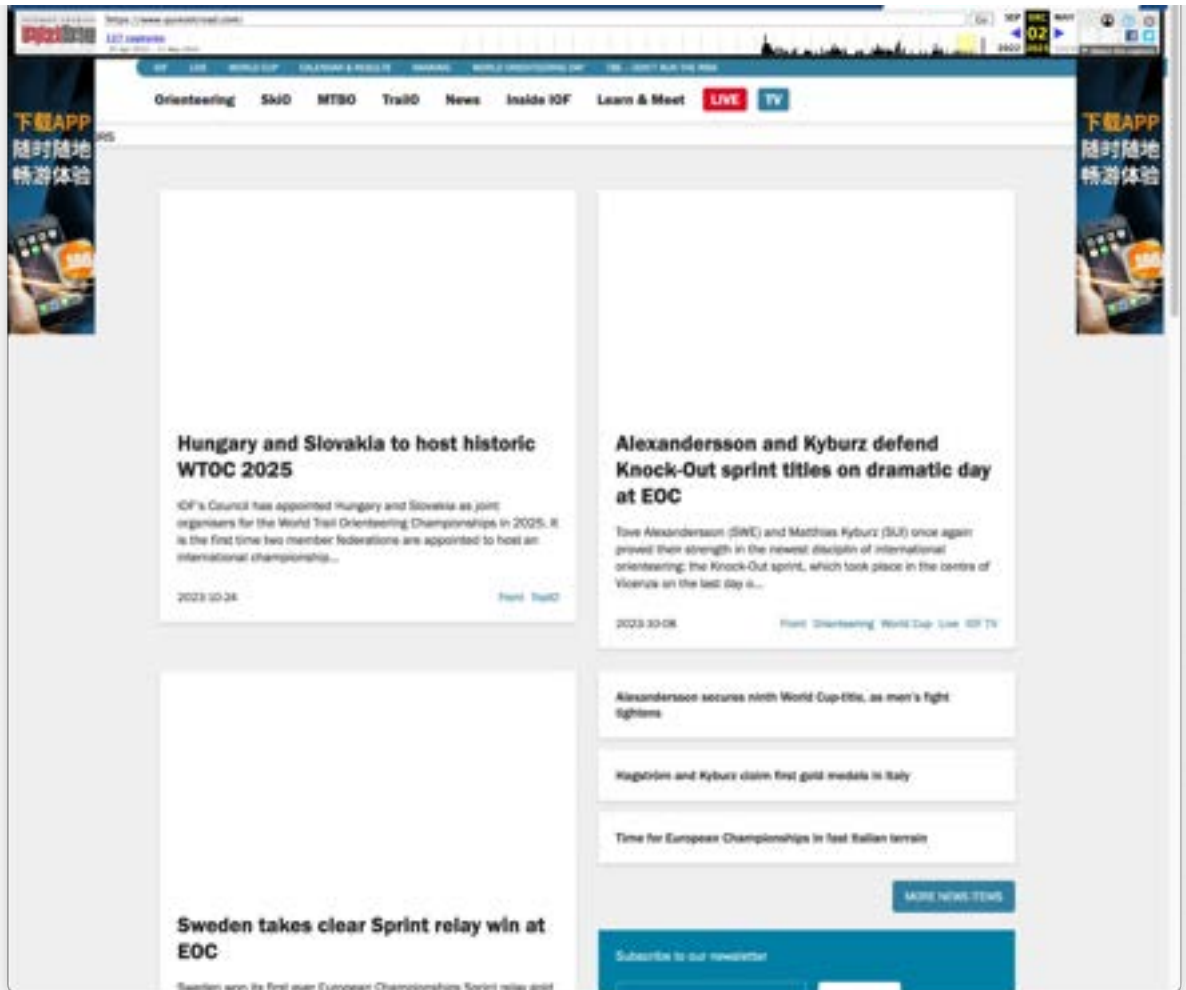
Why attestations?

Mitigate Harm	Create Value
Help Prevent Abuse	Enable Sport Community
Brace for large-scale AI fakes	Enable Online Intermediaries

Too numerous for blacklisting

- Theft of community **intellectual property**
- Malicious impersonation of **community institutions**
- Mostly invisible to defenders thanks to **smart targeting**

- Takedown too costly, too time-consuming
- Fraud too easy, too fast and too cheap to pull off
- Vast reservoir of domains available for fraud



Malicious impersonation of well-known online media brands...

...works with irrelevant domain names



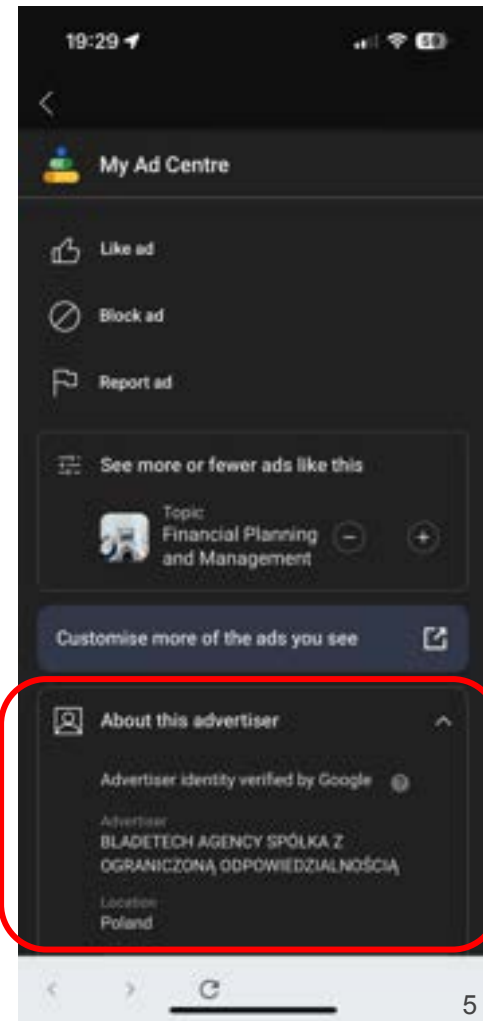


Outgoing advert link domain not shown to user (Youtube sponsored link)



Dismal advertiser identity verification by online intermediaries

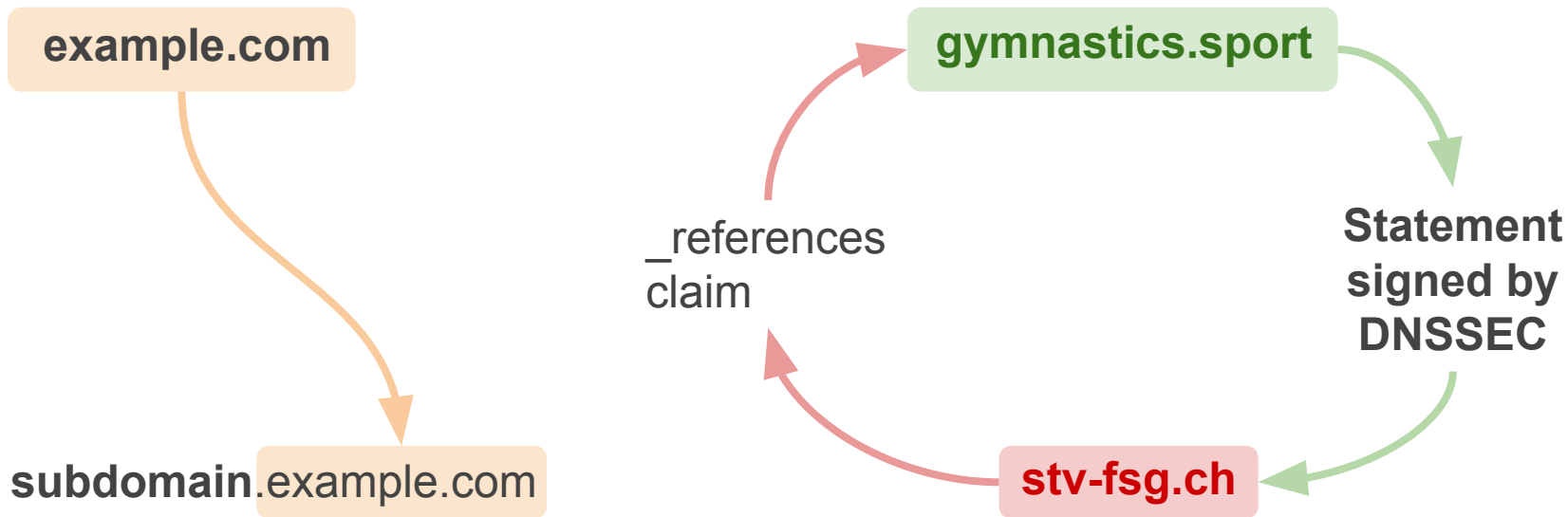
Advertiser identity verification not based on outgoing link domain



Affiliation Logo Programs **Considered Harmful**

1. Logos are **easy** to fake
2. Logos are **inefficient** for tracking
3. Site takedown **is no deterrent**

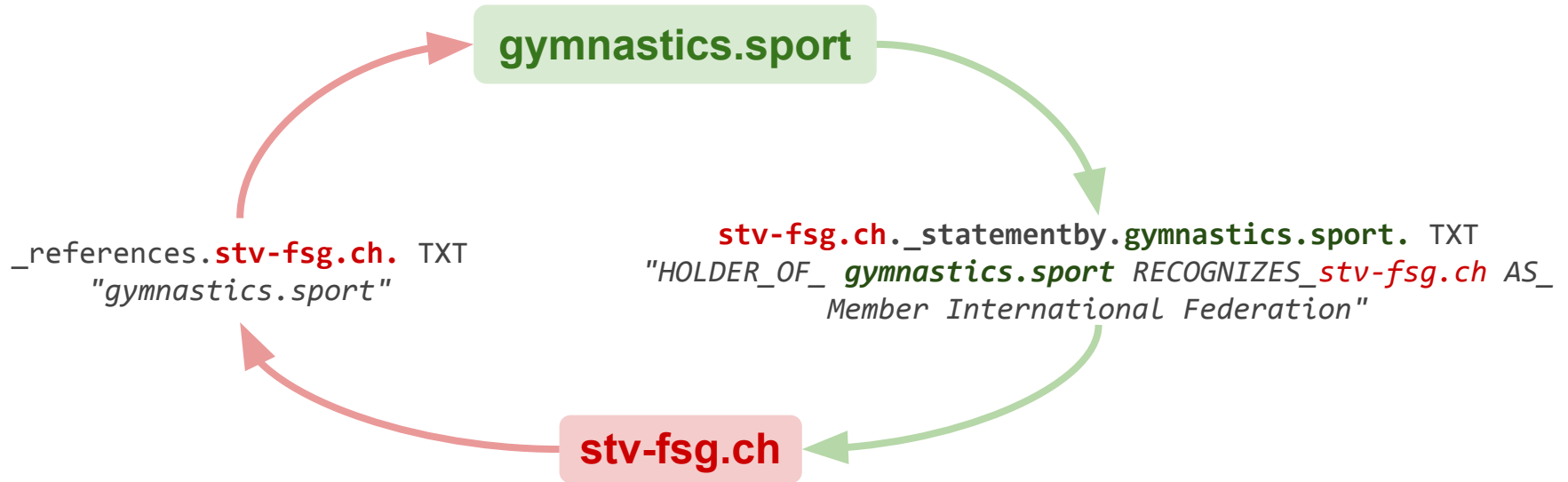
Delivering Attestations over the DNS, signed by DNSSEC



“Vertical” parent-child link

“Diagonal” link of separate domains

Diagonal links



International Sport Federations Umbrella Organizations



SportAccord
[sportaccord.sport](http://sportaccord sport)



ASOIF

Association of Summer Olympic International Federations
www.asoif.com

WOF

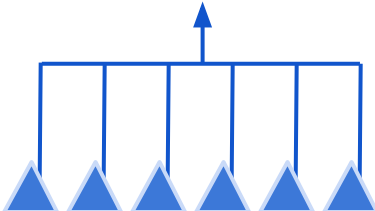
Winter Olympic Federations (formerly AIOWF Association of International Olympic Winter Sports Federations)
<https://olympics.com/ioc/international-federations/aiowf>

ARISF

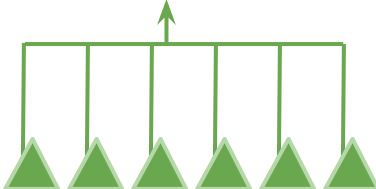
Association of IOC Recognised International Sports Federations
www.arisf.sport

AIMS

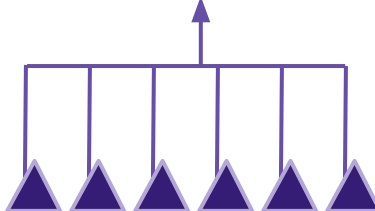
Alliance of Independent recognised Members of Sport
aims.sport



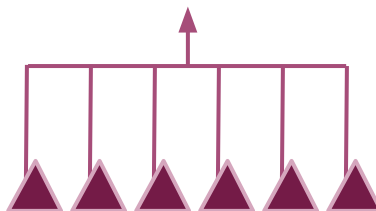
ASOIF member int'l federations



WOF member int'l federations



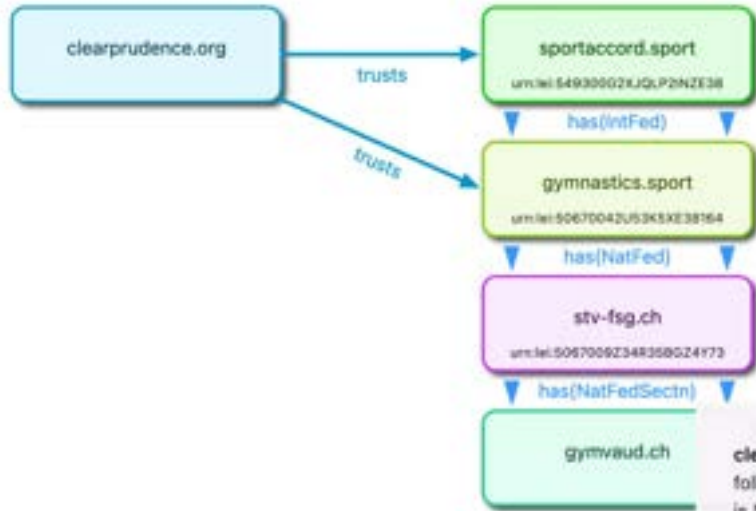
ASOIF member int'l federations



ASOIF member int'l federations

Existing Experimental Project

GYMVAUD.CH



sportaccord.sport	Association of umbrella organizations
gymnastics.sport	International Federation
stv-fsg.ch	National Federation
gymvaud.ch	Regional Federation

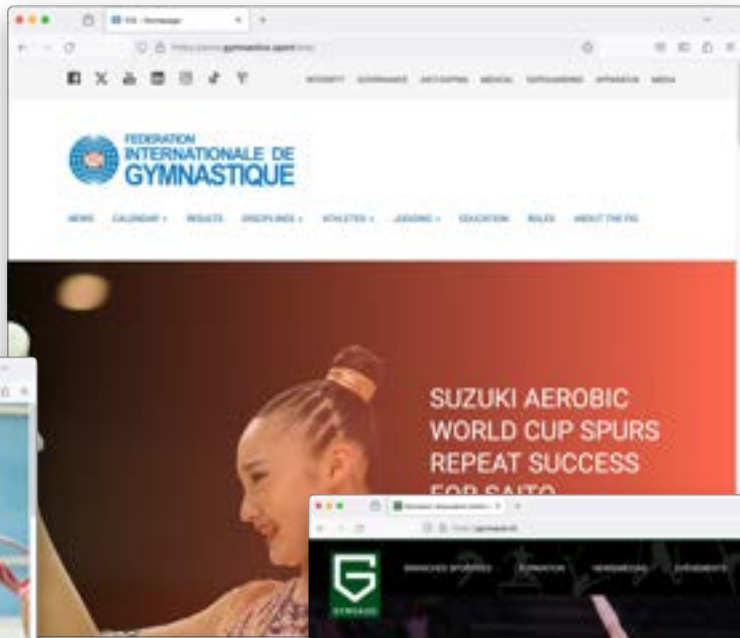
Attestation Statements

clearprudence.org reports that stv-fsg.ch has the following relationship to gymvaud.ch: gymvaud.ch is NatFedSectn of stv-fsg.ch.

Learn more about _Ass_
(Close this top)

<http://gymvaud.ch.whoswho>

(Uses public resolver via HTTPS)



Attestation Statements

[verifieddomainname.5067009Z34R35BGZ4Y73.lei-dns-api-demo.core.info.TXT "stv-fsg.ch"](#)

Attestation statement by lei-dns-api-demo.core.info about stv-fsg.ch:

stv-fsg.ch is verified as domain name for [urn:lei:5067009Z34R35BGZ4Y73](#)

[gymnastics.sport.statementby.clearprudence.org.TXT "Attestation: clearprudence.org trusts gymnastics.sport"](#)

Attestation statement by clearprudence.org about gymnastics.sport:

clearprudence.org trusts gymnastics.sport

[verifieddomainname.50670042U53K5XE38164.lei-dns-api-demo.core.info.TXT "gymnastics.sport"](#)

Attestation statement by lei-dns-api-demo.core.info about gymnastics.sport:

gymnastics.sport is verified as domain name for [urn:lei:50670042U53K5XE38164](#)

[sportaccord.sport.statementby.clearprudence.org.TXT "Attestation: clearprudence.org trusts sportaccord.sport"](#)

Attestation statement by clearprudence.org about sportaccord.sport:

clearprudence.org trusts sportaccord.sport

[verifieddomainname.549300G2XJQLP2INZE38.lei-dns-api-demo.core.info.TXT "sportaccord.sport"](#)

Attestation statement by lei-dns-api-demo.core.info about sportaccord.sport:

sportaccord.sport is verified as domain name for [urn:lei:549300G2XJQLP2INZE38](#)

Underlying DNS records
(experimental attestation statements)

Report Statements

[gymvaud.ch. statementby.clearprudence.org. TXT "Report: stv-fsg.ch_has\(NatFedSectn\) gymvaud.ch"](#)

Report statement provided by clearprudence.org about stv-fsg.ch concerning gymvaud.ch:

stv-fsg.ch has(NatFedSectn) gymvaud.ch

[stv-fsg.ch. statementby.clearprudence.org. TXT "Report: stv-fsg.ch_publicId_urn:lei:5067009Z34R35BGZ4Y73"](#)

Report statement provided by clearprudence.org about stv-fsg.ch concerning [urn:lei:5067009Z34R35BGZ4Y73](#):

stv-fsg.ch has Public ID [urn:lei:5067009Z34R35BGZ4Y73](#)

[stv-fsg.ch. statementby.clearprudence.org. TXT "Report: gymnastics.sport_has\(NatFed\) stv-fsg.ch"](#)

Report statement provided by clearprudence.org about gymnastics.sport concerning stv-fsg.ch:

gymnastics.sport has(NatFed) stv-fsg.ch

[gymnastics.sport. statementby.clearprudence.org. TXT "Report: sportaccord.sport_publicId_urn:lei:50670042U53K5XE38164"](#)

Report statement provided by clearprudence.org about gymnastics.sport concerning [urn:lei:50670042U53K5XE38164](#):

gymnastics.sport has Public ID [urn:lei:50670042U53K5XE38164](#)

[gymnastics.sport. statementby.clearprudence.org. TXT "Report: sportaccord.sport_has\(IntFed\) gymnastics.sport"](#)

Report statement provided by clearprudence.org about sportaccord.sport concerning gymnastics.sport:

sportaccord.sport has(IntFed) gymnastics.sport

[sportaccord.sport. statementby.clearprudence.org. TXT "Report: sportaccord.sport_publicId_urn:lei:549300G2XJQLP2INZE38"](#)

Report statement provided by clearprudence.org about sportaccord.sport concerning [urn:lei:549300G2XJQLP2INZE38](#):

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Underlying DNS records
(experimental report statements)

Defining a Language for Attestations

- Must support machine interpretation and inference
- Should be similar to natural language
 - Similar to “english-like” syntax objective of SQL
 - Necessary to interface with management and legal
 - Facilitates use of AI natural language interfaces
- Minimise risk of human misinterpretation
- Not specific to Sport Community; not specific to .sport TLD
 - Examples:
 - `office.com._statementby.microsoft.com. TXT "HOLDER_OF_ microsoft.com _OWNS_ office.com (May carry third-party content)"`
 - `microsoft.com._statementby.clearprudence.org. TXT "clearprudence.org _KNOWS_ microsoft.com AS_ Well-known Brand Domain Name"`
 - Higher chance of adoption, adaptation to new needs
 - Ecosystem of specialized rating agencies

Lessons Learned from Experimental Project

- DNSSEC only needed for attestations
 - Not needed for claims
- Report statements by third party viable
 - Facilitates bootstrapping
- Use of TXT-Records viable
 - Proviso: wildcard TXT record may require checking for wildcard DNS record
- Subject-Verb-Object-Complement syntax desirable
 - Example: `stv-fsg.ch._statementby.gymnastics.sport.` TXT `"HOLDER_OF_gymnastics.sport_RECOGNIZES_stv-fsg.ch AS_Member International Federation"`
- Attestation statements must be specific
 - For instance, “_trusts_” keyword is too broad (considering “_knows_as_”)
 - Example: `stv-fsg.ch._statementby.clearprudence.org.` TXT `"HOLDER_OF_clearprudence.org_KNOWS_stv-fsg.ch AS_Recognized National Sport Federation"`