OFS Portal®

CONNECTING THE OIL & GAS WORLD

www.ofs-portal.com

OFS Portal®

Taking the Lead in Oil & Gas Supply Chain Transformation

Chris Welsh - CEO

OFS Portal CEO & Chairman of the Board

PIDX INTERNATIONAL
The place to go for
oil and gas e-business standards

Chairman of the Board

PESA
PETROLEUM EQUIPMENT
& SERVICES ASSOCIATION

Supply Chain Committee Member

OFS PORTAL MISSION

We are an advocacy group funded by diverse oil & gas suppliers promoting best practices for eCommerce based on core principles

Data Protection, Ownership & Security of Electronic Commerce

Use of Open Industry Standards for Data & Transactions

Reducing the Cost of eCommerce for all Trading Parties

STRATEGIC GOALS

Increase Global **Adoption** of eCommerce

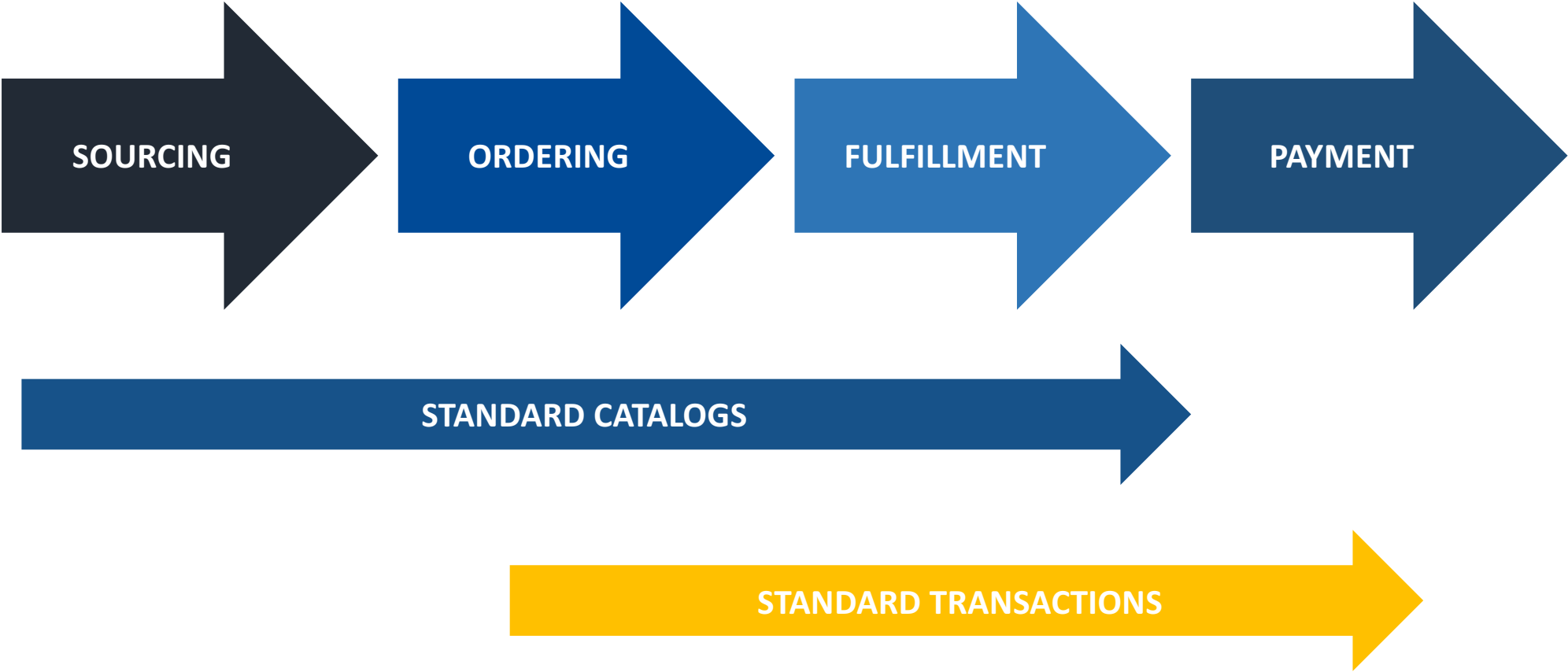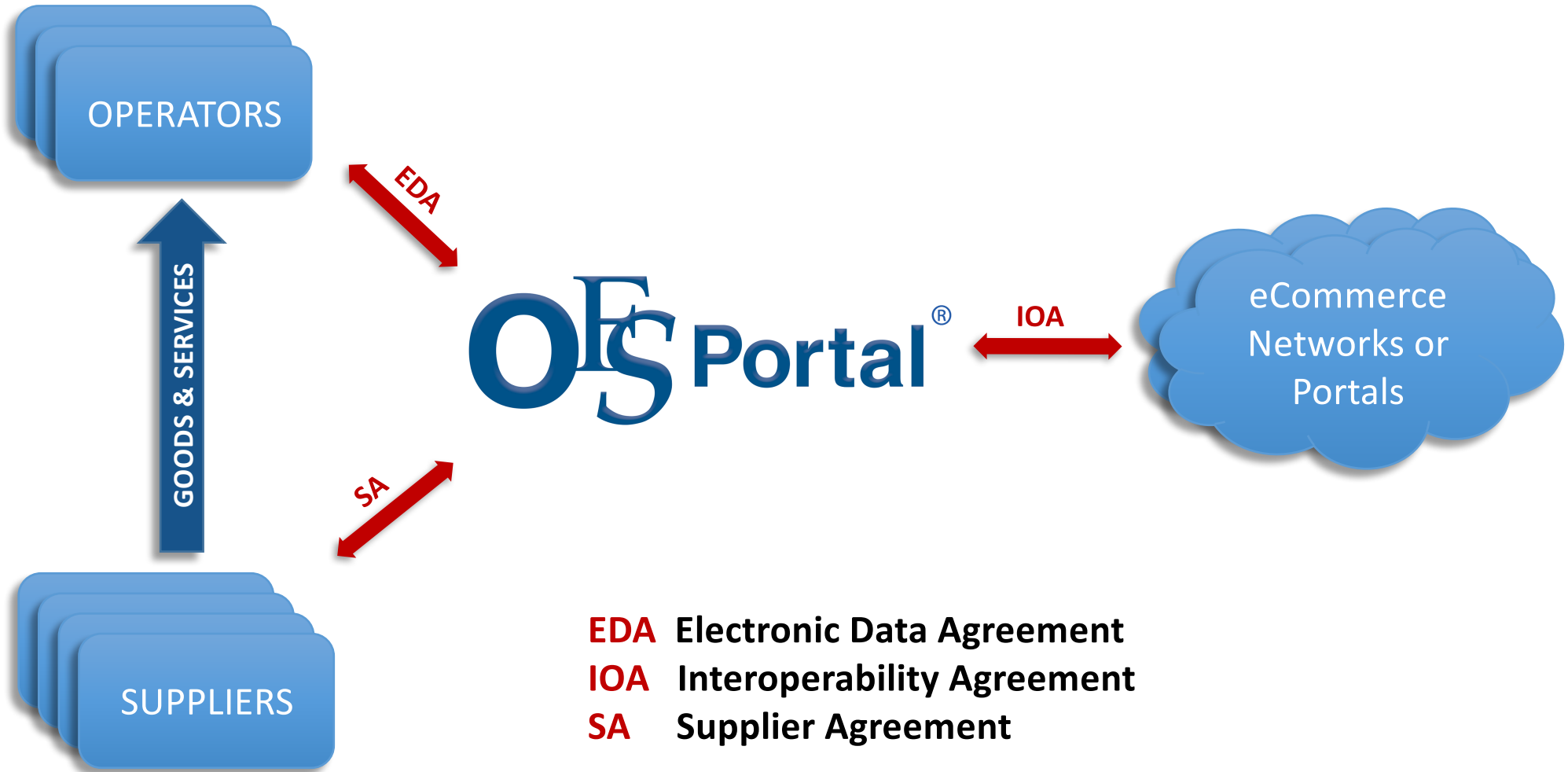Increase Supplier **Membership**
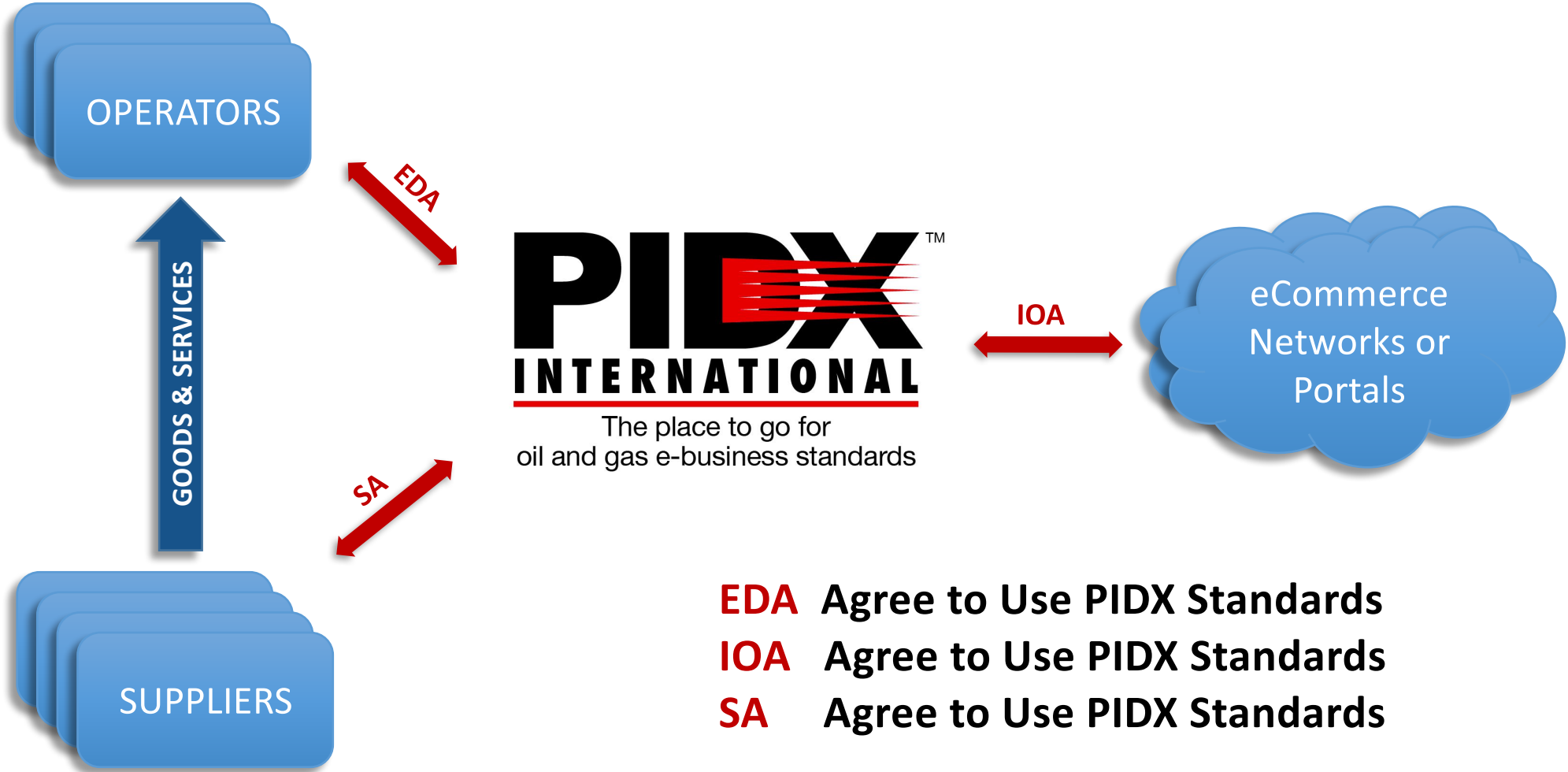
Increase Guidance & Support to **PIDX**

MEMBERS

FOCUS ON THE OPERATORS P2P PROCESS

SOURCING → ORDERING → FULFILLMENT → PAYMENT

STANDARD CATALOGS

STANDARD TRANSACTIONS

LEGAL FRAMEWORK

OPERATORS

GOODS & SERVICES

SUPPLIERS

EDA

O**F**S Portal®

IOA

eCommerce Networks or Portals

SA

EDA Electronic Data Agreement
IOA Interoperability Agreement
SA Supplier Agreement

PIDX IS KEY TO OUR FRAMEWORK

EDA   Agree to Use PIDX Standards
IOA   Agree to Use PIDX Standards
SA   Agree to Use PIDX Standards

WHERE MEMBERS TRANSACT

OFS Portal®

GROWTH IN THE USE OF PIDX

Dramatic Growth

Buyer Agreements

- Cumulative Agreements
- Agreements by Year

2002 2003 2004 2005 2006 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 (YTD)
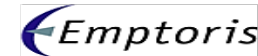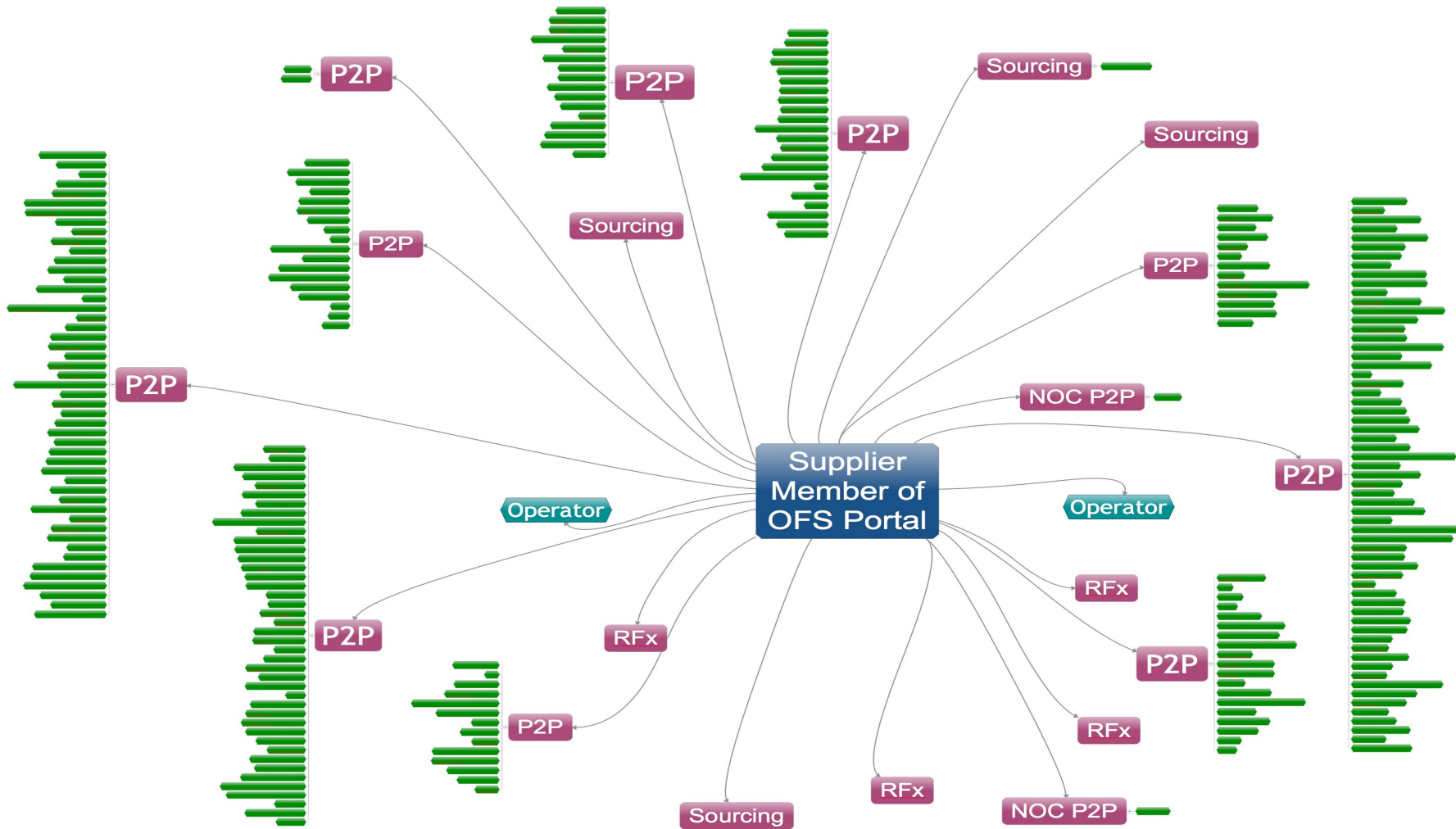
260+ OPERATORS INCLUDING NOCs

30+ ECOMMERCE NETWORKS

OIL & GAS E-COMMERCE IS COMPLEX

INCREASING COMPLEXITY FOR SUPPLIERS
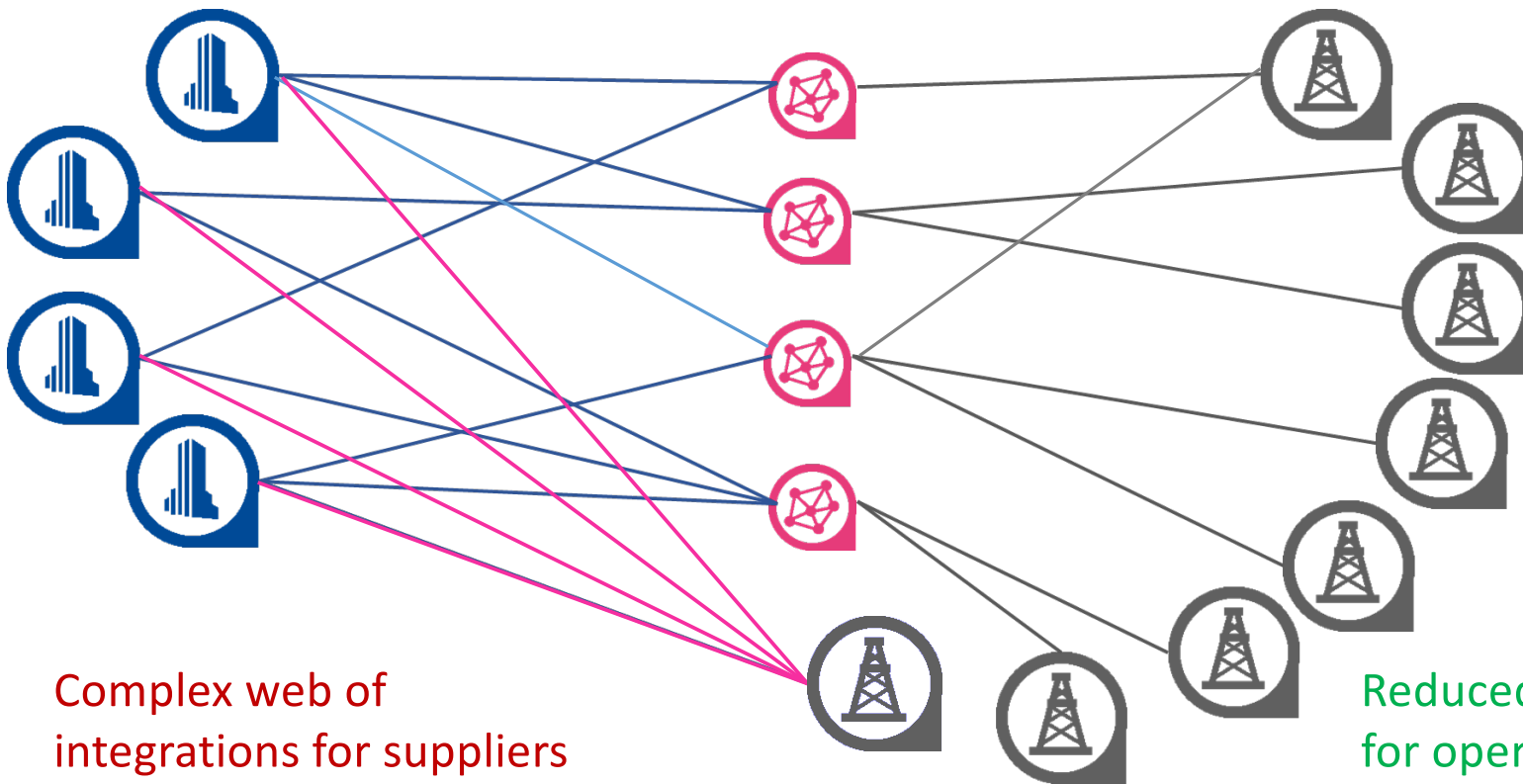
ANSI X.12

PIDX

PEPPOL
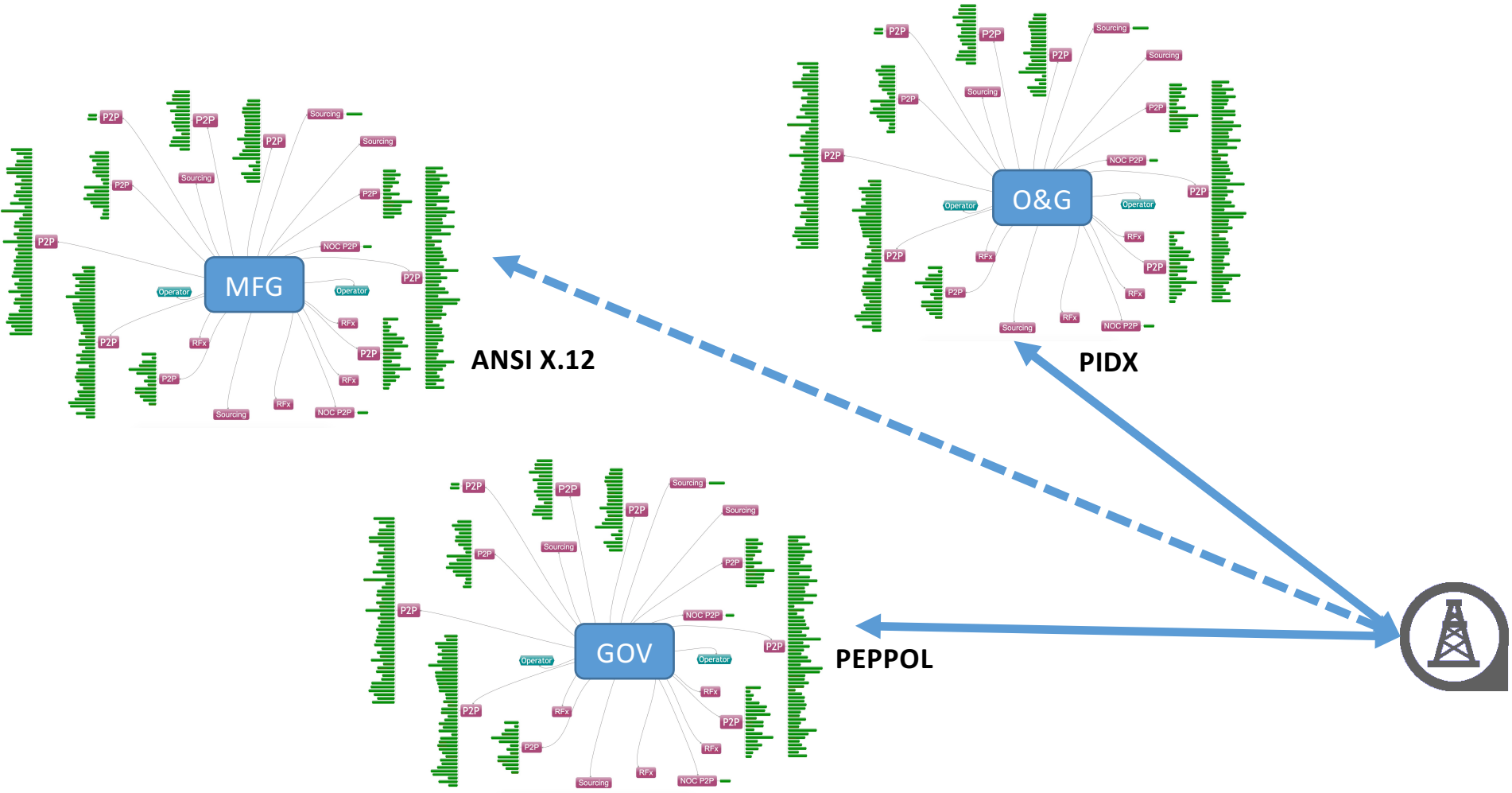
CURRENT P2P ENVIRONMENT
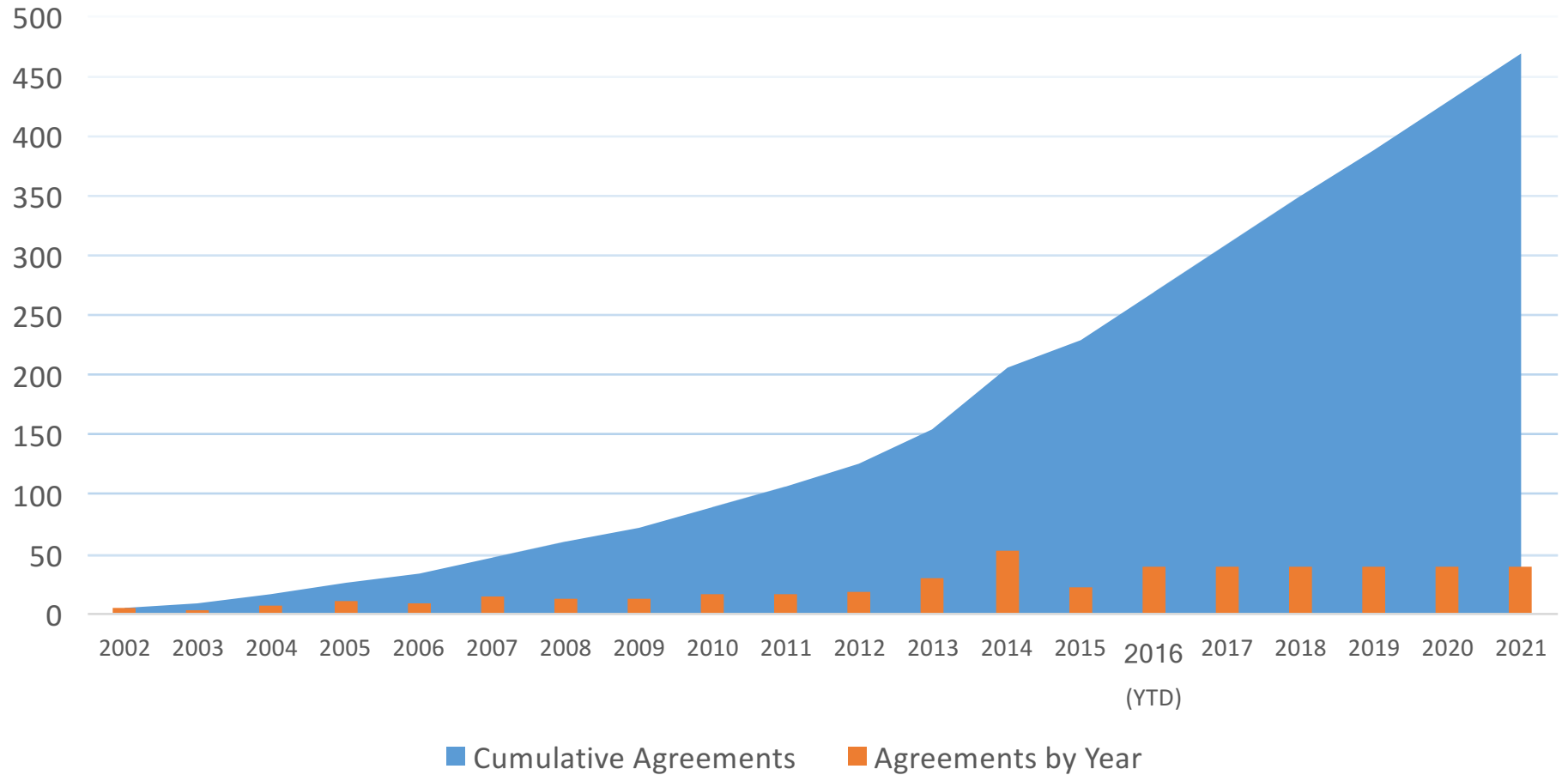
SUPPLIERS

P2P

OPERATORS

Complex web of
integrations for suppliers

Reduced complexity
for operators

AN E-COMMERCE WAVE IS COMING

5 YEARS GROWTH?

■ Cumulative Agreements   ■ Agreements by Year
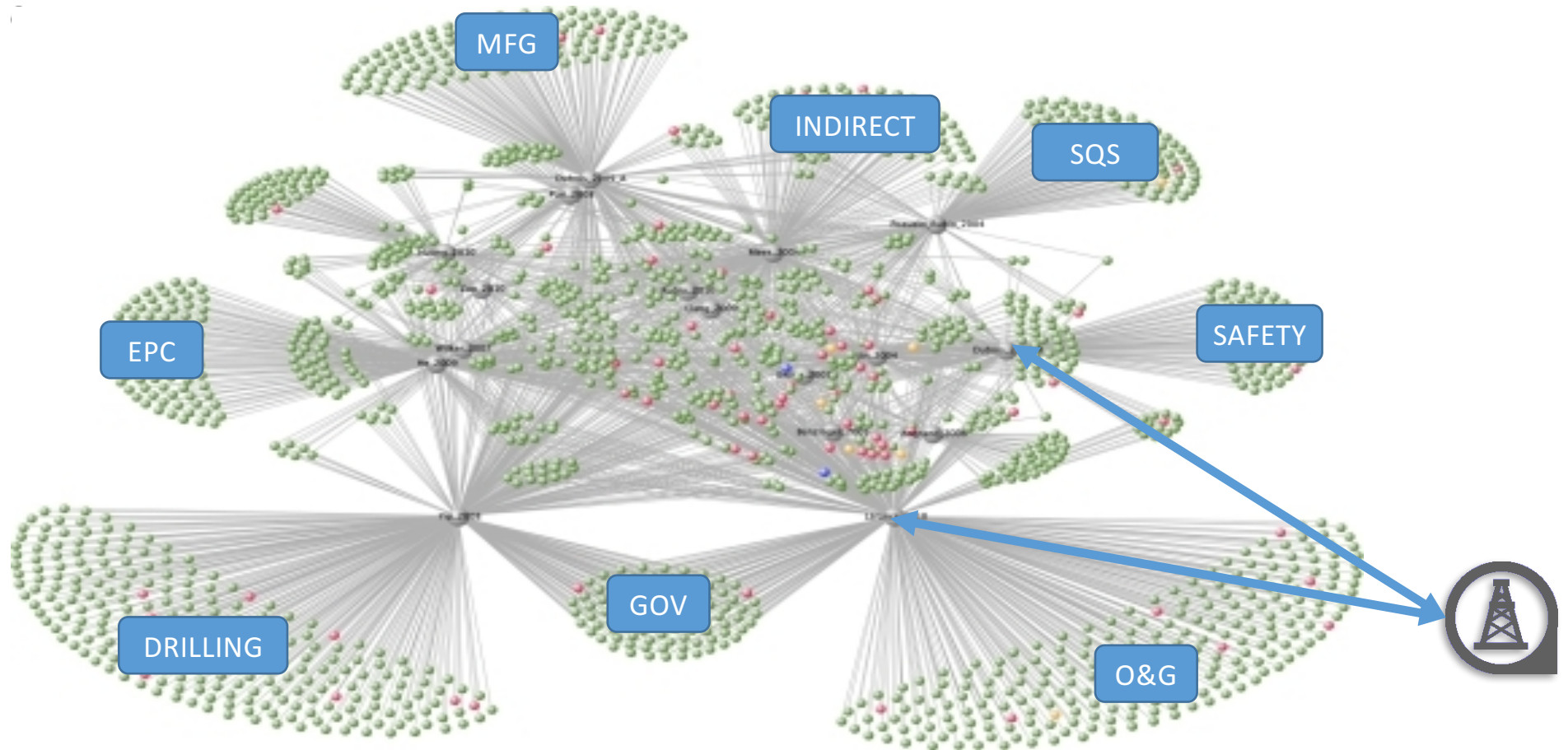
WHERE DOES COMPLEXITY STOP FOR ECOMMERCE?

THE TIME IS RIGHT FOR SUPPLIER O2C NETWORKS

O2C & P2P ENVIRONMENT

P2P

O2C

Reduced complexity
for suppliers

Reduced complexity
for operators
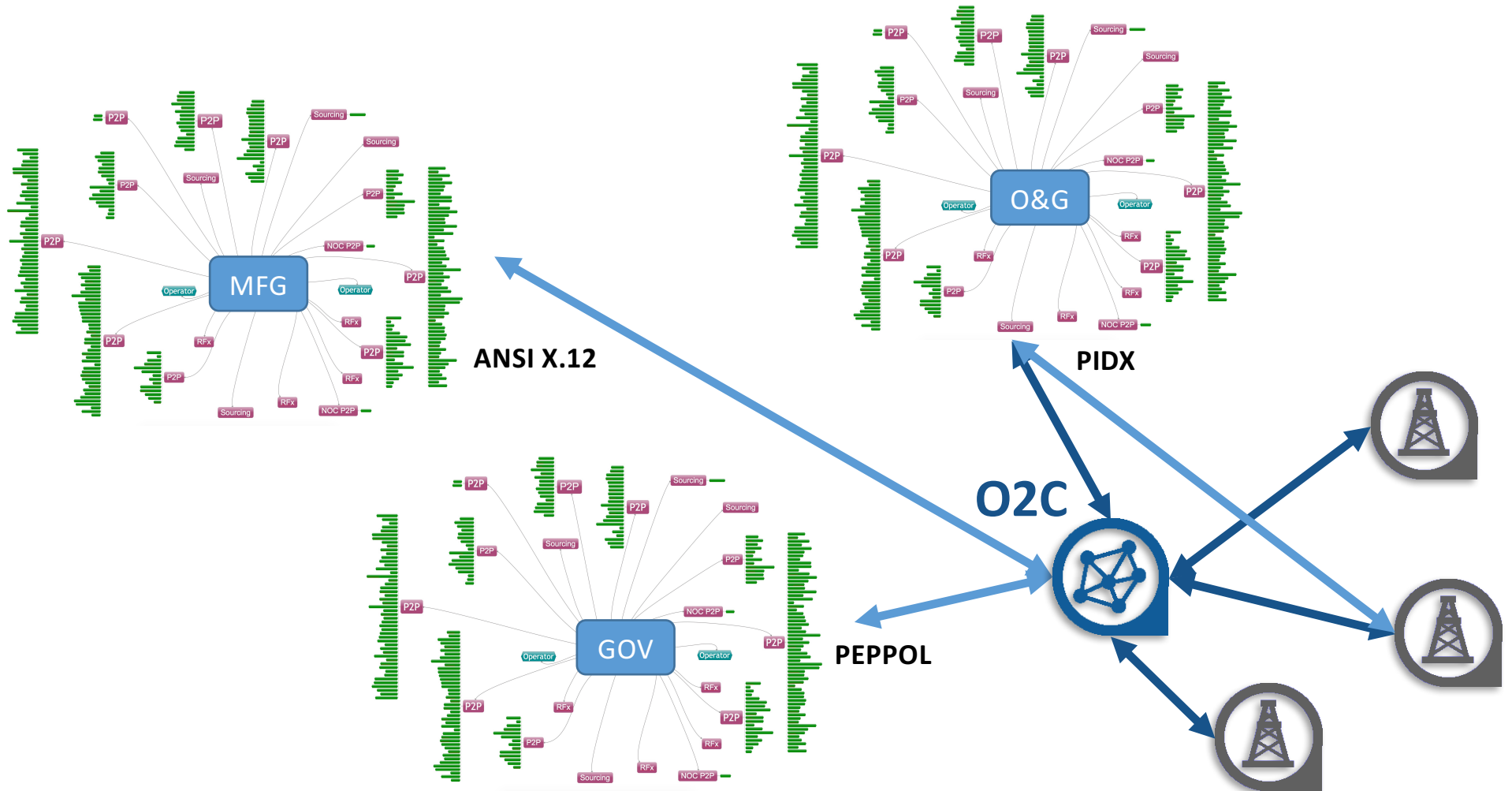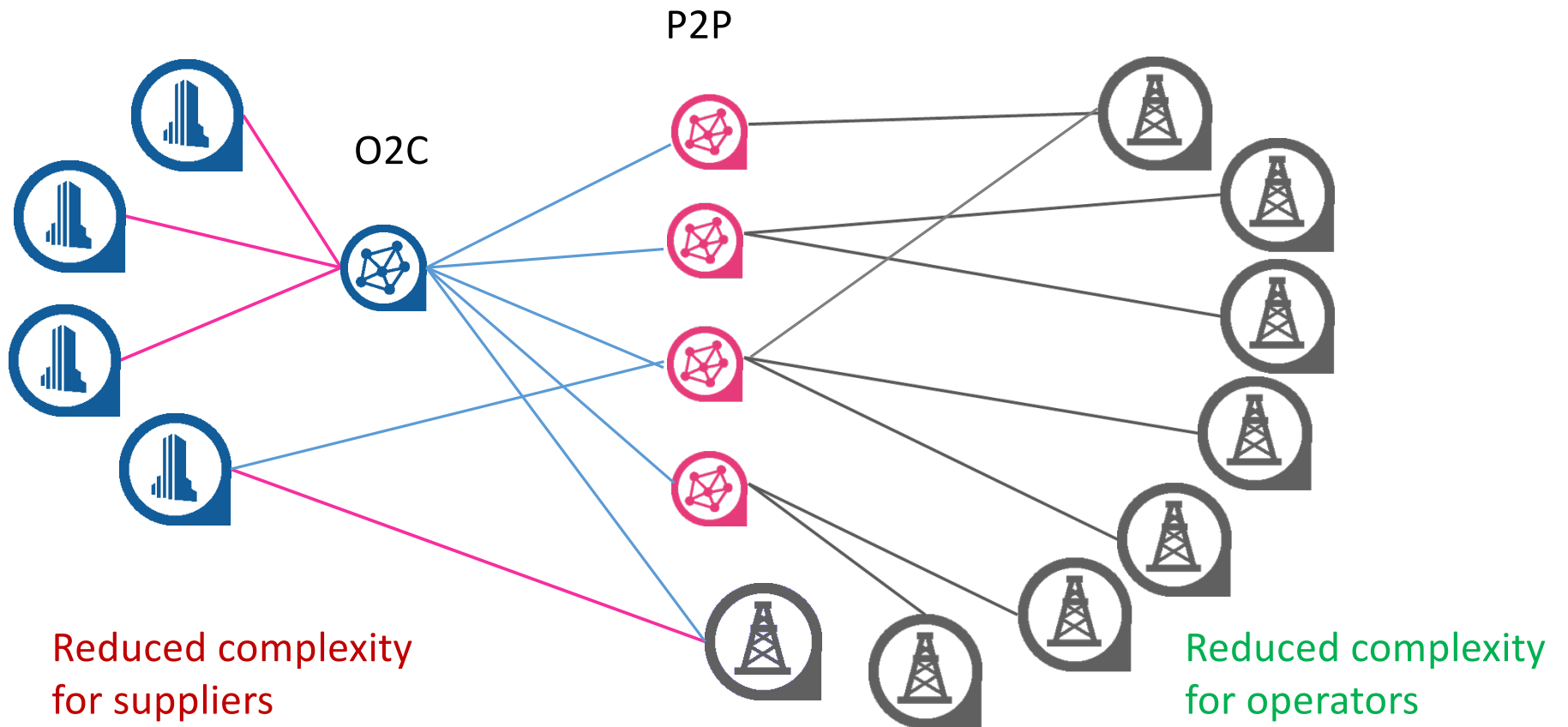
WHAT ARE WE FACED WITH IN O&G?

Supply Chain Transformation

New Operating Models (BlockChain, PEPPOL)

Need for Increased Cyber Security

Drag & Drop Integration

PIDX IS GLOBAL AND INCLUSIVE

Digitization of the Supply Chain is Key and is Underway

PIDX is in a unique position to lead real supply chain transformation because we already have all parties at the table!

FUTURE 3RD PARTY-LESS TRANSACTIONS

The consequences of the Blockchain can be far reaching in the future for you and me. Our economy, politics & our society will change. You're saying this is just the beginning, sure, but with such a technology **it's better to be shapers than spectators**. There's too much at stake. So wake up.

—*Deloitte Deutschland*

FUTURE 3RD PARTY-LESS TRANSACTIONS

Right to ownership of property

By providing an undisputable public ledger accessible to everyone, blockchains enable everyone the right to have ownership of property. This (new) digital human-right provides tools to 1/3 of the world's population without banking access an ability to represent and defend themselves in a global economy.

Right to transact without intermediaries

In the past, transactions always required a third party, and that third party could exercise prior restraint. This political control is no longer possible, as bitcoin and blockchains have ushered in a new era of uncensorable peer-to-peer transactions. Available to everyone with an internet connection.

Right to self initiative

Imagine a global economic layer in which everyone, no matter their location, could participate. An ecosystem of financial apps tailored to your needs, and the ability to switch frictionlessly, creating a hypercompetitive global economy to create the best experiences. Here's the tools to be the change you wish to see.

PEPPOL how it works, the basic operations of an Access Point

The **supplier** uses their **business application** to **create the invoice**.

The **sender of an electronic document** (for example an e-invoice, an e-order or an e-catalogue) sends the document to a **PEPPOL Access Point** using mechanisms agreed with their Access Point provider.

The Access Point identifies the **service required** (validates the type of document being sent) and also identifies the Access Point for **the recipient** by first checking the PEPPOL Service Metadata Locator (SML) to find the relevant Service Metadata Publisher (SMP). The Service Metadata Publisher (a kind of Yellow Pages) provides the delivery point for the government agency's invoices.

The supplier's **Access Point** delivers the document **to** the buyer's **Access Point**.
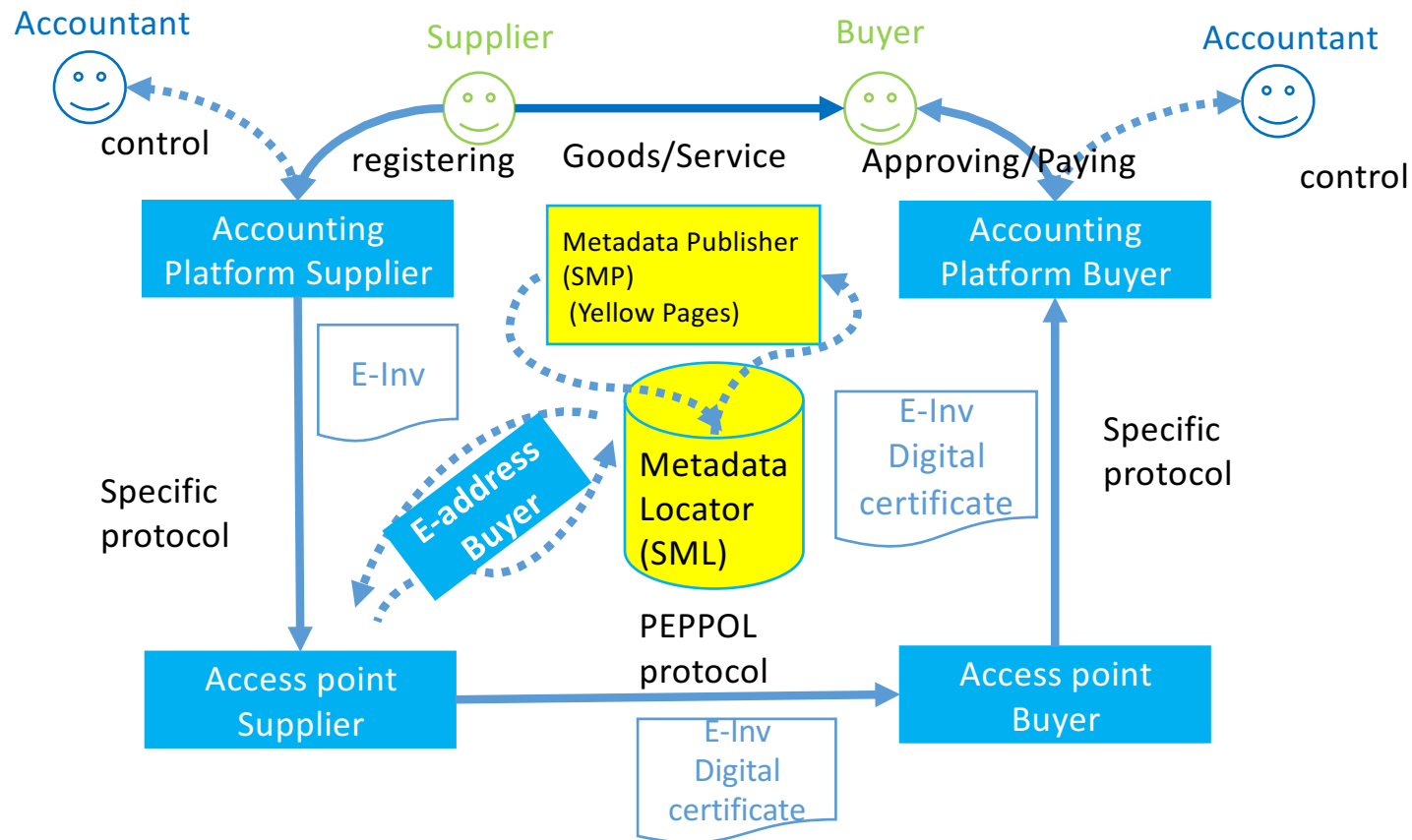
The **receiving Access Point** delivers the document to the **recipient**.

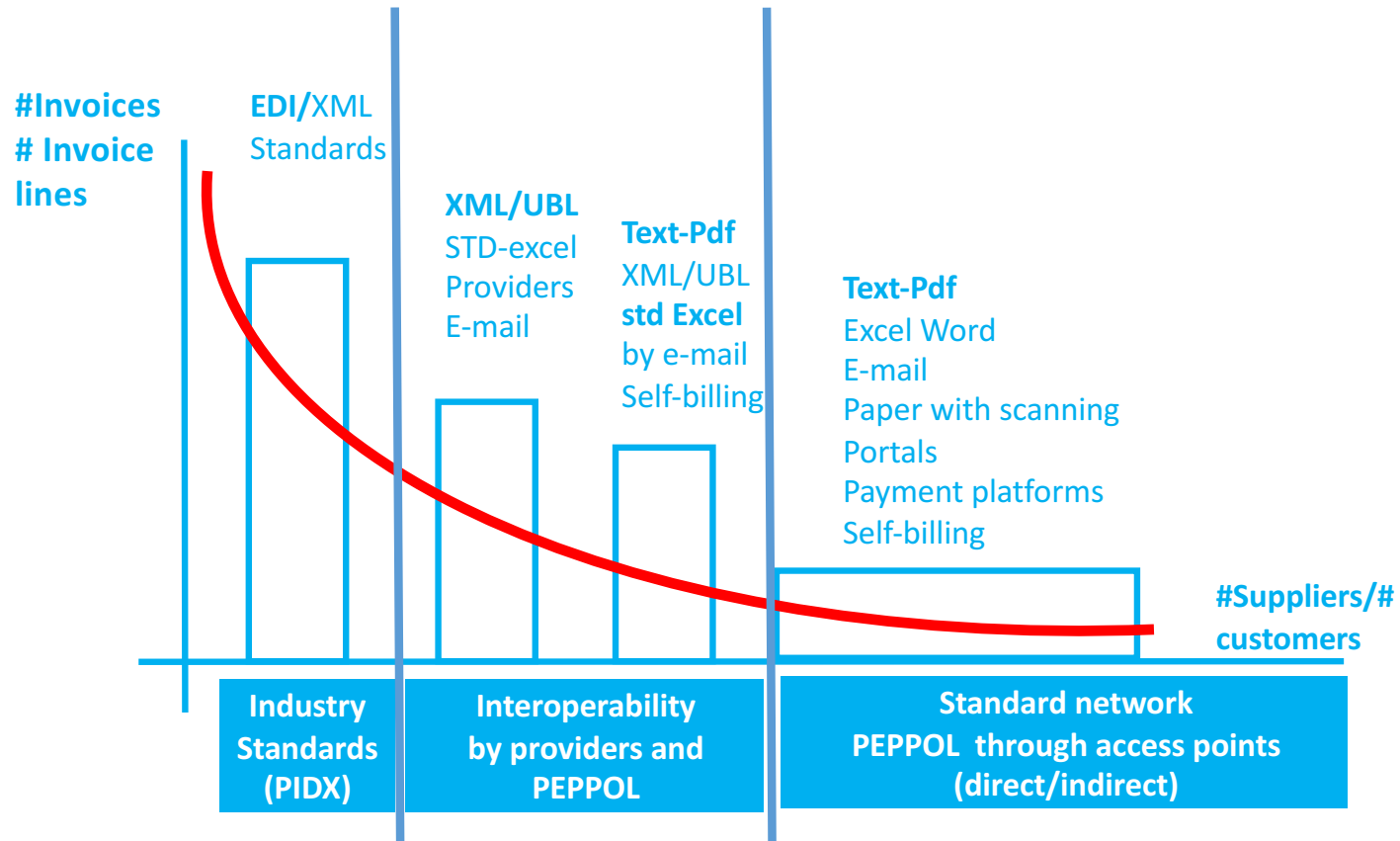The **buyers** use **their business application** to **process** the **invoice**.

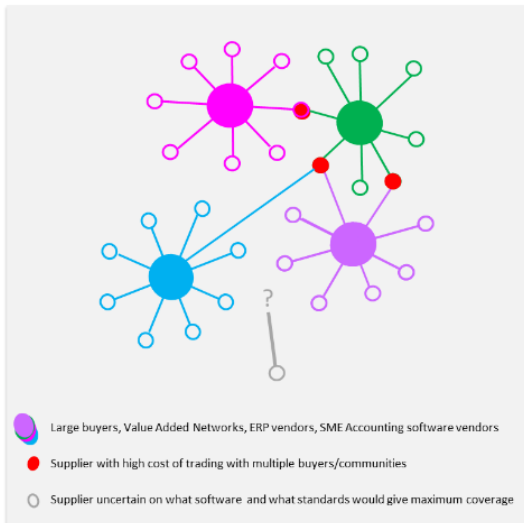# PEPPOL 4-Corner Transport Model
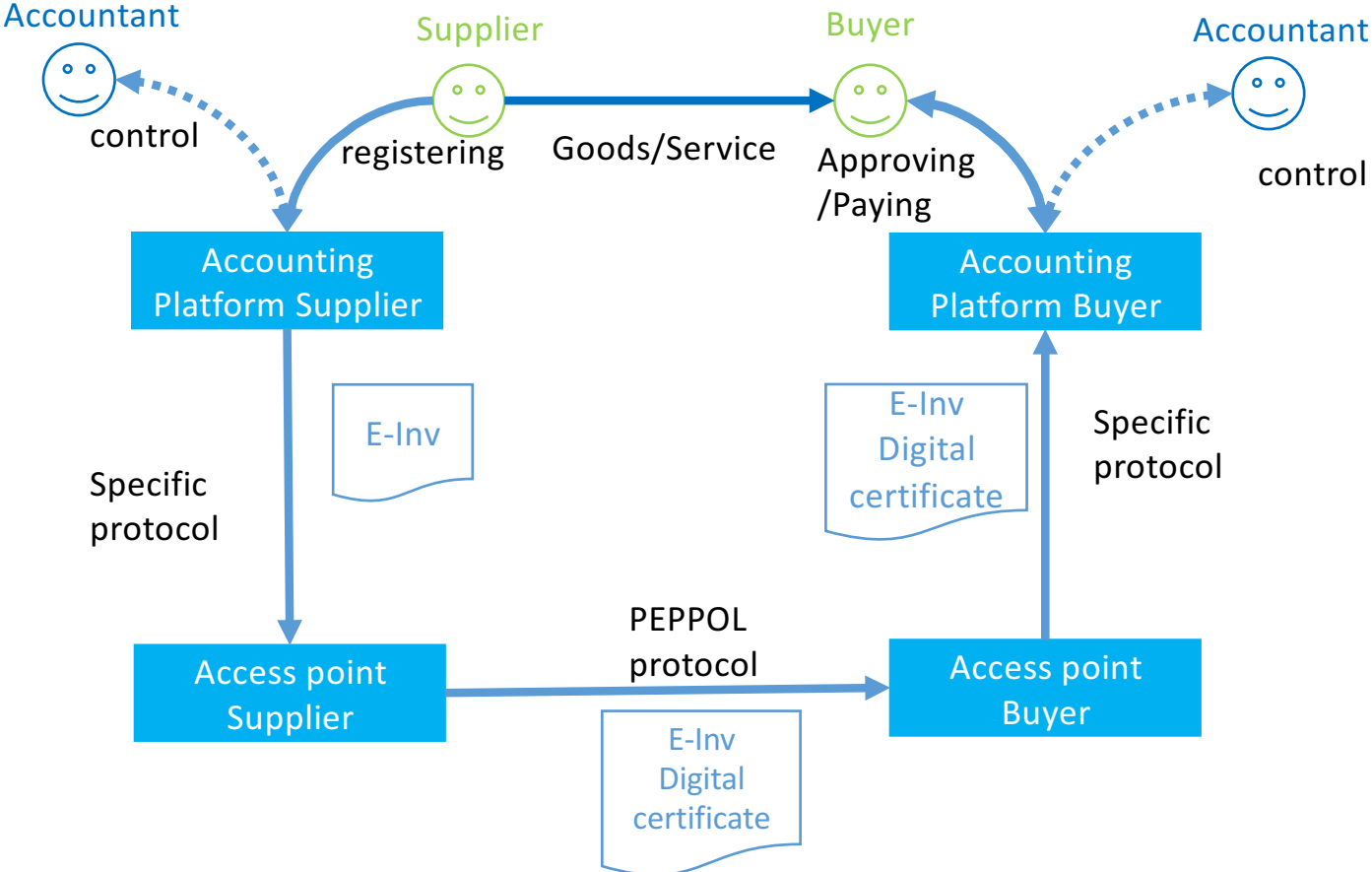
The main components of the PEPPOL Transport Infrastructure:

PEPPOL is not about replacing sector specific EDI/XML, high efficiency, high volume protocols

Interoperability Framework also used by Australia

Large buyers, Value Added Networks, ERP vendors, SME Accounting software vendors

Supplier with high cost of trading with multiple buyers/communities

Supplier uncertain on what software and what standards would give maximum coverage

The Interoperability Framework is a set of policies, standards and guidelines **to enable any two parties to communicate** irrespective of the system or standard that each uses.

The standards are existing, internationally and locally accepted standards. Some are used in the

1 & 4 Trading Partners
2 & 3 connectors/access points

A whole of economy approach:
Standardising interconnections, bridges communities & provides certainty
Every business has an access point into the ecosystem (internal, vendor provided or outsourced)

Open business discovery – discover the digital capabilities of your trading partner
Well-established and an internationally accepted solution.
Designed for scalability
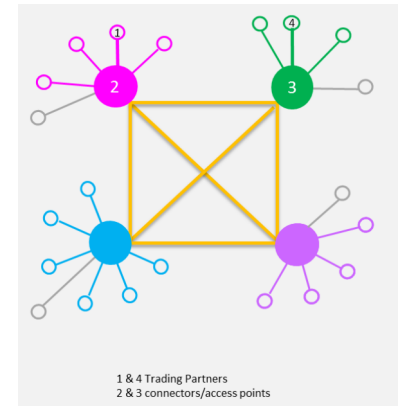
CYBER-SECURITY AND GUARANTEED DELIVERY

Capitalizing on our core secure internet infrastructure, the Oil & Gas industry will use PIDX to accelerate the global adoption of standardized data interchange in a secure manner between all organizations in our eco-system irrespective of data type.
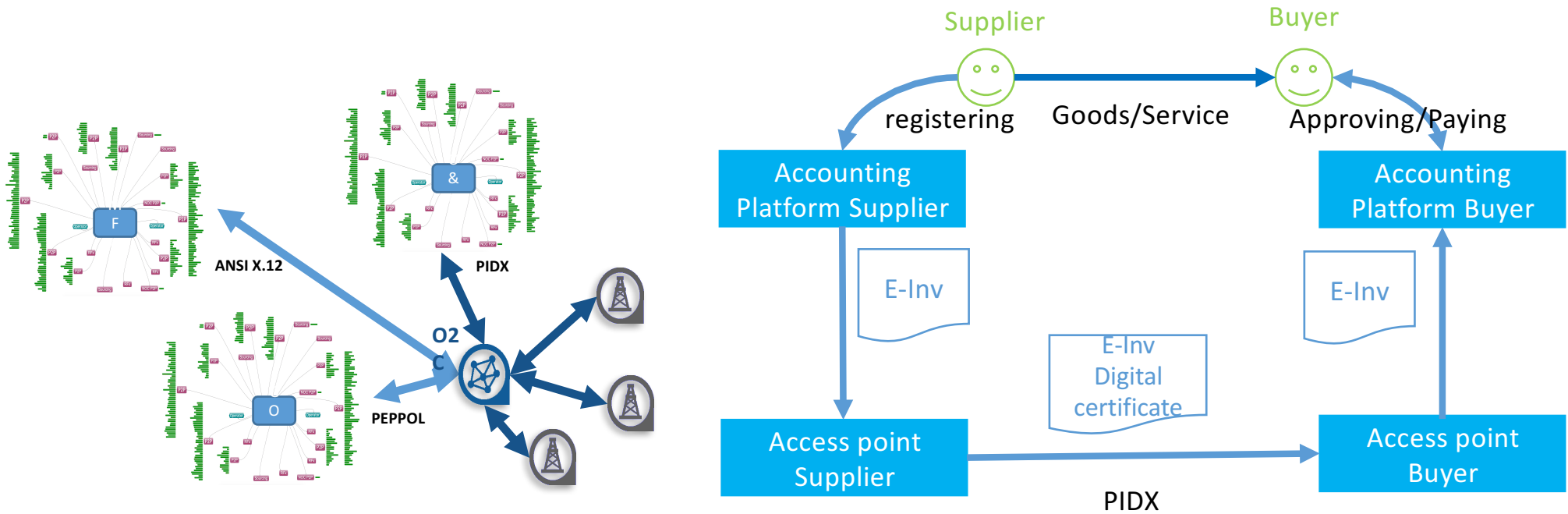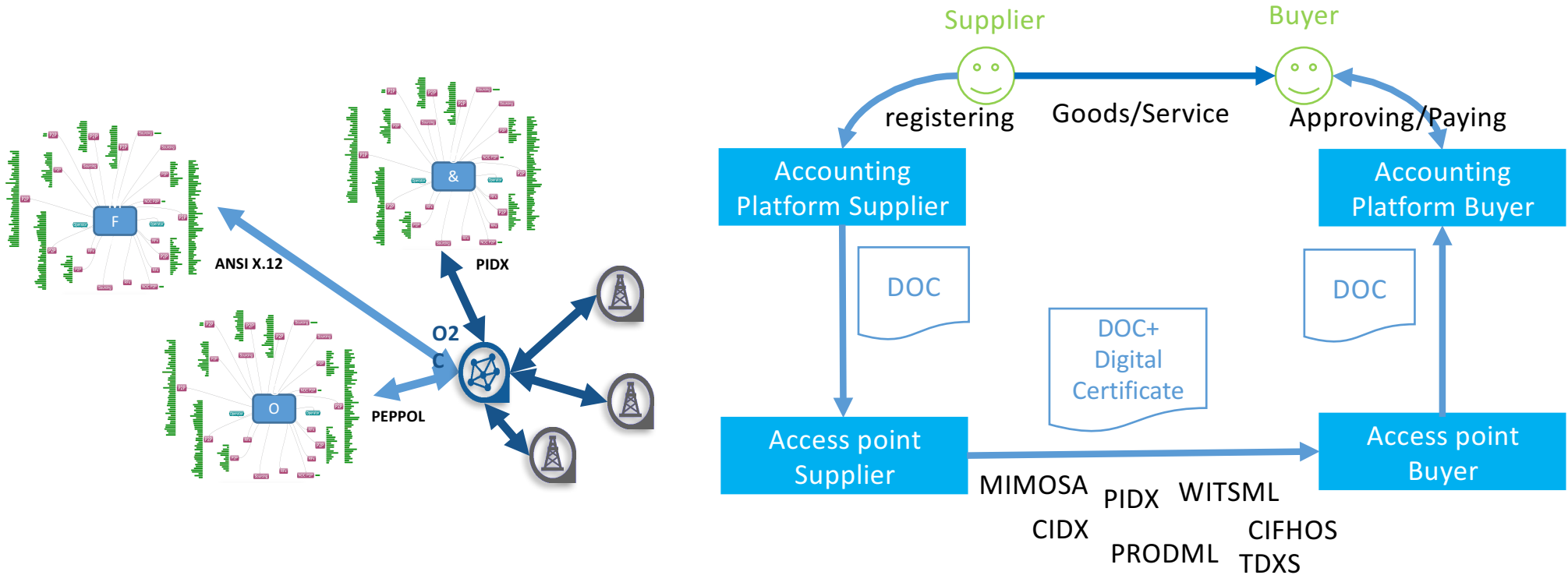
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The Bermuda Triangle in Oil & Gas is a **mythical** part of the Operator's Supply Chain where dozens of **eCommerce Networks & Projects** have disappeared.

Unexplained circumstances surround some of these accidents, Other Networks have seemingly vanished from the area in good weather without even radioing distress messages!

Bermuda · **Florida** · **Gulf of Mexico** · **Tropic of Cancer** · **Bermuda Triangle** · **Puerto Rico** · **Caribbean Sea**

Energy Portal · Altra · Oil & Gas Online · NYMEX · Network Oil · UpstreamInfo · Energy Prism · World Oil · Wellbid · eNersection · GeoNet Energy · TradeRanger · National Oilwell · Petroleum Place · Oil Exchange · iWilson.com · RigZone · FreeMarkets · PetroCosm · Houston Street · PennNet · eLink Commerce · Enron Online · RigMatch · IndigoPool · PetroWeb · Novistar · Wellogix

GUIDANCE FOR PIDX

PIDX is in a unique position to lead real supply chain transformation.

We already have all parties at the table.

We need to capitalizing on our core secure internet infrastructure.

Use PIDX to accelerate the global adoption of standardized data interchange in a secure manner between all organizations in our eco-system irrespective of data type.

For Oil & Gas, PIDX is the platform of the future, now is the time to mobilize it!

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For Oil & Gas, PIDX is the platform of the future, now is the time to mobilize it **before we too join the triangle**!

Taking the Lead in Oil & Gas Supply Chain Transformation

Chris Welsh - CEO