



PIDX SURVEY: HOW ARE PIDX STANDARDS BEING USED IN THE INDUSTRY?

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STANDARDS ADOPTION COUNCIL UPDATE:

- STANDARDS ADOPTION IS AN INITIATIVE FROM PIDX INNOVATION DAY 2020
- NEW WORK GROUP (WG 05) INITIATED IN 2021
- CHARTER APPROVED BY STANDARDS & GUIDELINES COMMITTEE JUNE 25, 2021
- APPROVED BY PIDX EXECUTIVE COMMITTEE AUGUST 18, 2021
- KICKOFF MEETING ON FEBRUARY 17, 2022



CHARTER:

THE STANDARDS ADOPTION COUNCIL HAS BEEN ESTABLISHED TO DEVELOP AN ADOPTION STRATEGY AT THE TIME THAT A STANDARDS PROJECT IS PROPOSED, INCLUDING (1) DEFINING REAL-WORLD USE CASES THE STANDARDS SEEK TO SOLVE, (2) SETTING CLEAR KPIS AROUND STANDARDS ADOPTION SUCCESS, AND (3) IMPLEMENTING PROOF OF CONCEPTS (POCS) WITH PROJECT TEAM PARTICIPANTS PRIOR TO THE VOTING AND APPROVAL PROCESSES FOR STANDARDIZATION.



ADVANCE ADOPTION AND IMPLEMENTATION

1. UNDERSTAND THE CURRENT STANDARDS ADOPTION
2. UNDERSTAND THE REAL USE CASE AND VALUE FOR A STANDARD DEFINITION
3. GET INVOLVED AT THE STANDARD CONCEPT DEFINITION PHASE
4. SET KPI WHEN A STANDARD IS PUBLISHED
5. UNDERSTAND THE USAGE AND ADOPTION FOR A DEFINED STANDARD

STATUS AND ACTIONS:

- BUILDING INTO THE STANDARDS ADOPTION ITSELF
- SURVEY: WHO IS USING PIDX STANDARDS AND HOW?
- TESTING OF IMPLEMENTATION WITH PROOF OF CONCEPT (POC) FROM PIDX EMISSIONS

TRANSPARENCY DATA EXCHANGE (ETDX) – PIDX V.1.7 (DRAFT)



SURVEY TO PIDX MEMBERSHIP:

- 13 QUESTIONS: DEVELOPED BY STANDARDS ADOPTION COUNCIL, PIDX DOWNSTREAM, S&G, AND EXECUTIVE COMMITTEE
- SENT OUT TO 20 PIDX MEMBER COMPANIES
- OPENED SEPTEMBER 1, 2022
- CLOSED SEPTEMBER 30, 2022
- 10 REPLIES TO SURVEY (50%)
- RESULTS REVIEWED AT PIDX 2022 FALL CONFERENCE.



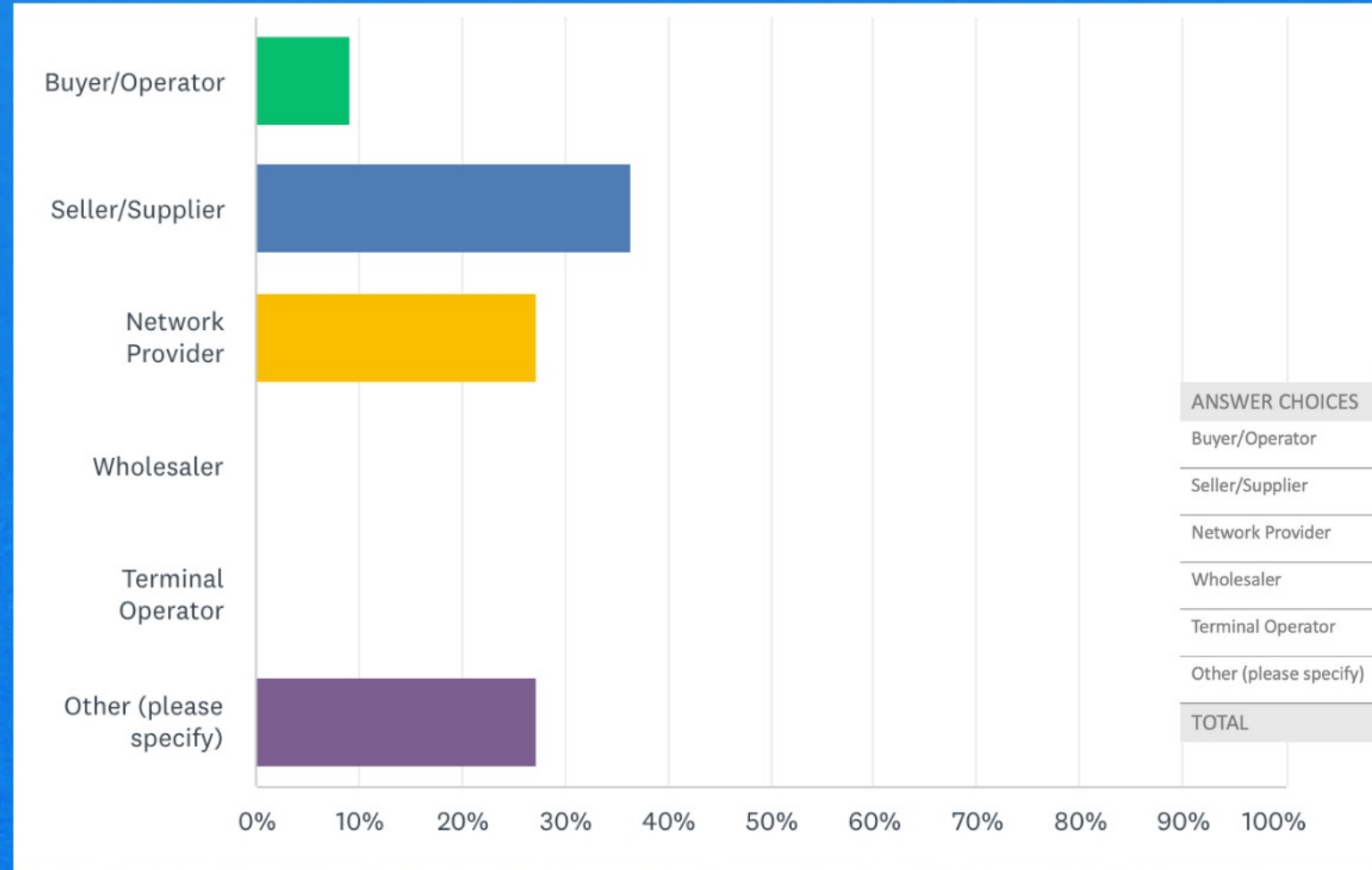
SURVEY TO BROADER AUDIENCE:

- AFTER PIDX 2022 FALL CONFERENCE, THE STANDARDS ADOPTION COUNCIL, S&G, AND EXECUTIVE COMMITTEE DECIDED TO SEND THE PIDX SURVEY TO A BROADER AUDIENCE
 - TARGET THOSE WHO DO E-INVOICING
 - PIDX EMAIL/NEWSLETTER RECIPIENTS
 - POSTS ON LINKEDIN
- SURVEY BEGAN ON MARCH 1, 2023
- CLOSED APRIL 12, 2023
- 22 REPLIES TO SURVEY
- NO RESPONSES ARE IDENTIFIABLE TO A SPECIFIC COMPANY



QUESTION 1:

DO YOU USE PIDX STANDARDS AS A:



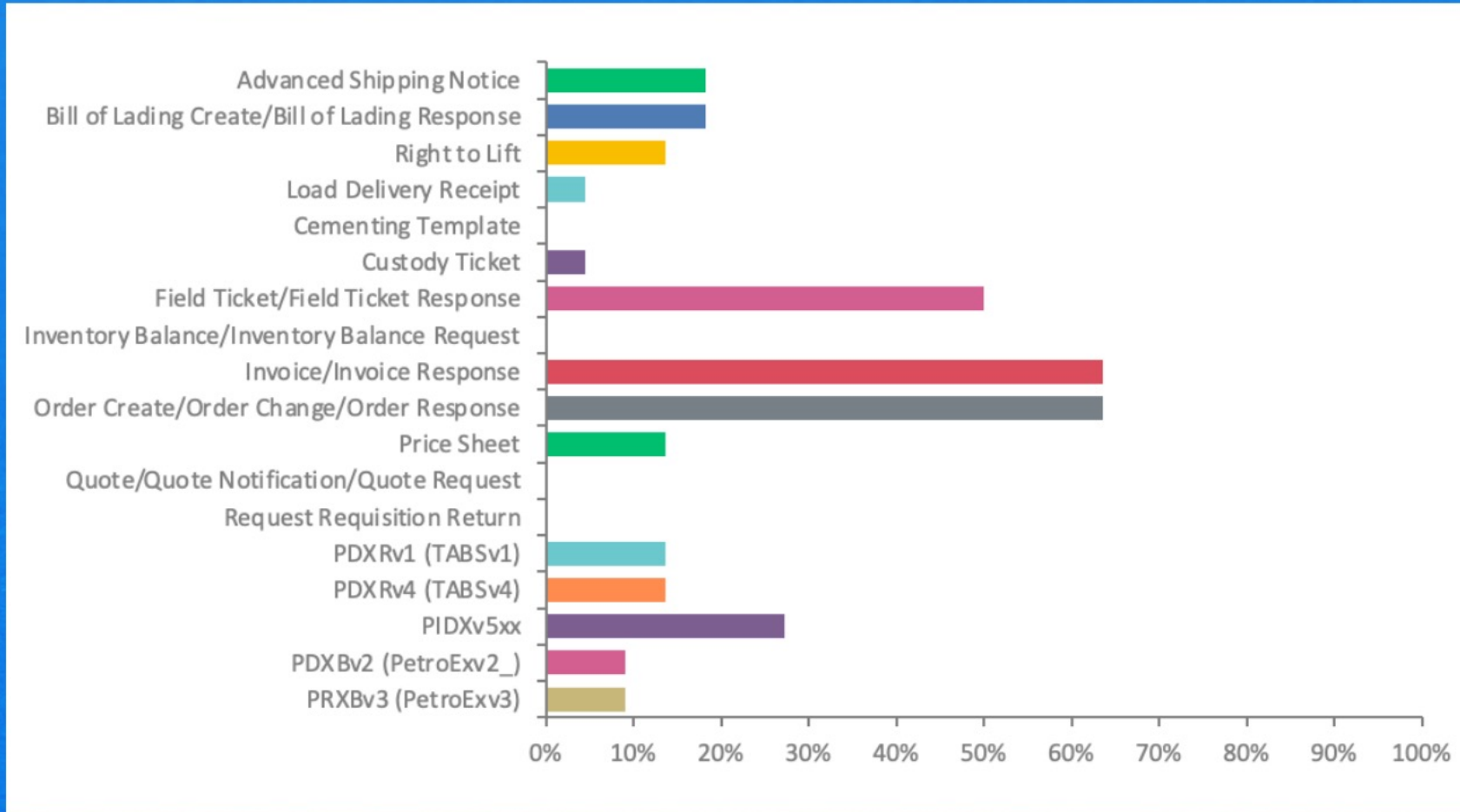
OTHER:

- CONSULTANT
- 3RD PARTY INTEGRATOR
- TECHNOLOGY PROVIDER
- DATA CLEANSING
- THIRD PARTY PROVIDER

ANSWER CHOICES	RESPONSES	
Buyer/Operator	9.09%	2
Seller/Supplier	36.36%	8
Network Provider	27.27%	6
Wholesaler	0%	0
Terminal Operator	0%	0
Other (please specify)	27.27%	6
TOTAL		22

QUESTION 2:

WHICH OF THE FOLLOWING PIDX STANDARDS DO YOU USE? (CHECK ALL THAT APPLY)



NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 2: (CONTINUED)

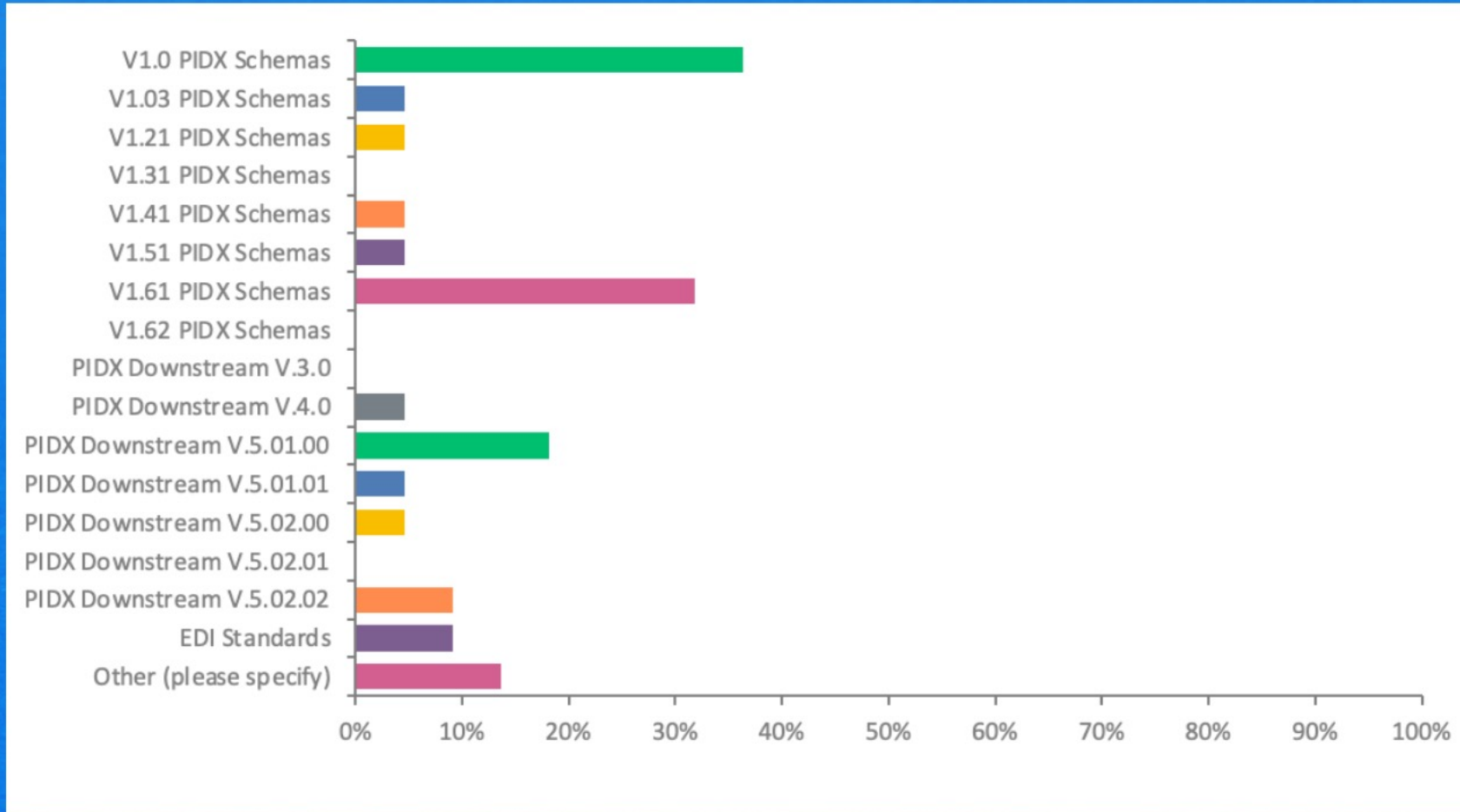
WHICH OF THE FOLLOWING PIDX STANDARDS DO YOU USE? (CHECK ALL THAT APPLY)

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

ANSWER CHOICES	RESPONSES	
Advanced Shipping Notice	18.18%	4
Bill of Lading Create/Bill of Lading Response	18.18%	4
Right to Lift <input type="checkbox"/>	13.64%	3
Load Delivery Receipt	4.55%	1
Cementing Template	0%	0
Custody Ticket	4.55%	1
Field Ticket/Field Ticket Response	50.0%	11
Inventory Balance/Inventory Balance Request	0%	0
Invoice/Invoice Response	63.64%	14
Order Create/Order Change/Order Response	63.64%	14
Price Sheet	13.64%	3
Quote/Quote Notification/Quote Request	0%	0
Request Requisition Return	0%	0
PDXRv1 (TABSV1)	13.64%	3
PDXRv4 (TABSV4)	13.64%	3
PIDXv5xx	27.27%	6
PDXBv2 (PetroExv2_)	9.09%	2
PRXBv3 (PetroExv3)	9.09%	2
TOTAL		71

QUESTION 3:

WHAT VERSION(S) OF THE STANDARD(S) DO YOU USE? (CHECK ALL THAT APPLY)



OTHER:

- CPDP, ODEX
- ETDX

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 3: (CONTINUED)

WHAT VERSION(S) OF THE STANDARD(S) DO YOU USE? (CHECK ALL THAT APPLY)

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

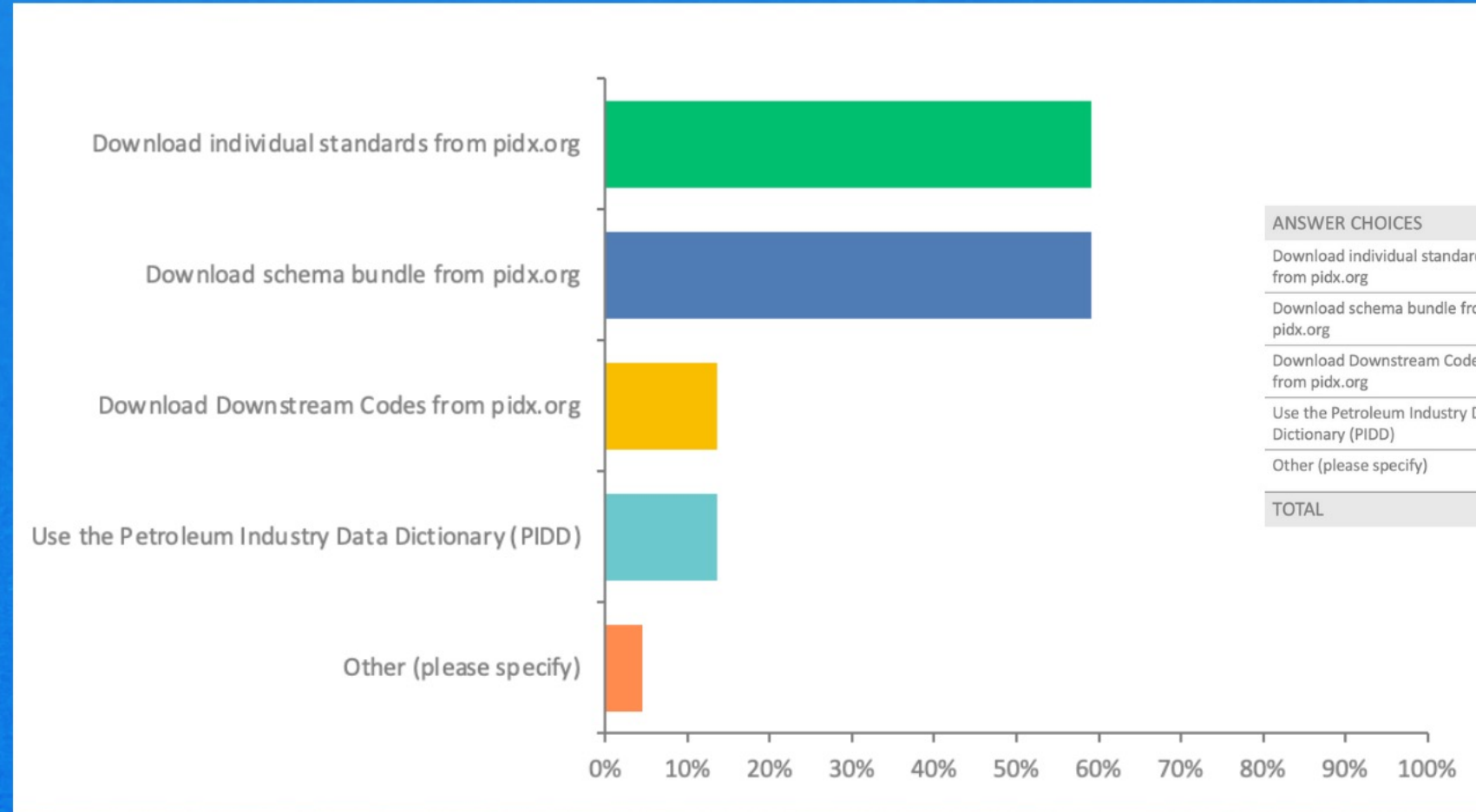
OTHER:

- CPDP, ODEX
- ETDX

ANSWER CHOICES	RESPONSES	
V1.0 PIDX Schemas	36.36%	8
V1.03 PIDX Schemas	4.55%	1
V1.21 PIDX Schemas	4.55%	1
V1.31 PIDX Schemas	0%	0
V1.41 PIDX Schemas	4.55%	1
V1.51 PIDX Schemas	4.55%	1
V1.61 PIDX Schemas	31.82%	7
V1.62 PIDX Schemas	0%	0
PIDX Downstream V.3.0	0%	0
PIDX Downstream V.4.0	4.55%	1
PIDX Downstream V.5.01.00	18.18%	4
PIDX Downstream V.5.01.01	4.55%	1
PIDX Downstream V.5.02.00	4.55%	1
PIDX Downstream V.5.02.01	0%	0
PIDX Downstream V.5.02.02	9.09%	2
EDI Standards	9.09%	2
Other (please specify)	13.64%	3
TOTAL		33

QUESTION 4:

HOW DO YOU ACCESS PIDX STANDARDS? (CHECK ALL THAT APPLY)



OTHER:

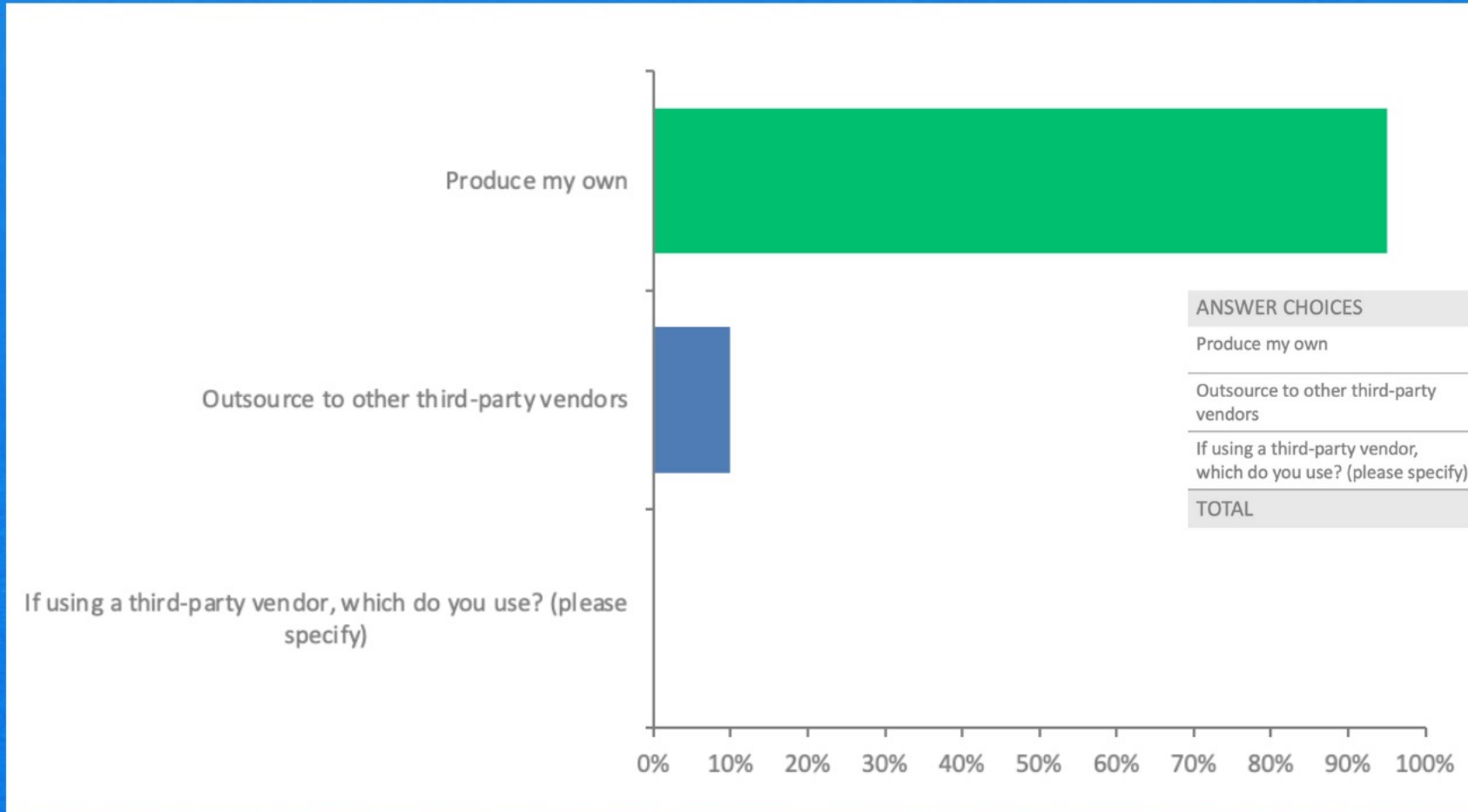
- TABS AND TDS VENDORS

ANSWER CHOICES	RESPONSES
Download individual standards from pidx.org	59.09% 13
Download schema bundle from pidx.org	59.09% 13
Download Downstream Codes from pidx.org	13.64% 3
Use the Petroleum Industry Data Dictionary (PIDD)	13.64% 3
Other (please specify)	4.55% 1
TOTAL	33

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 5:

DO YOU PRODUCE YOUR OWN PIDX DOCUMENTS, OR OUTSOURCE TO OTHER THIRD-PARTY VENDORS?

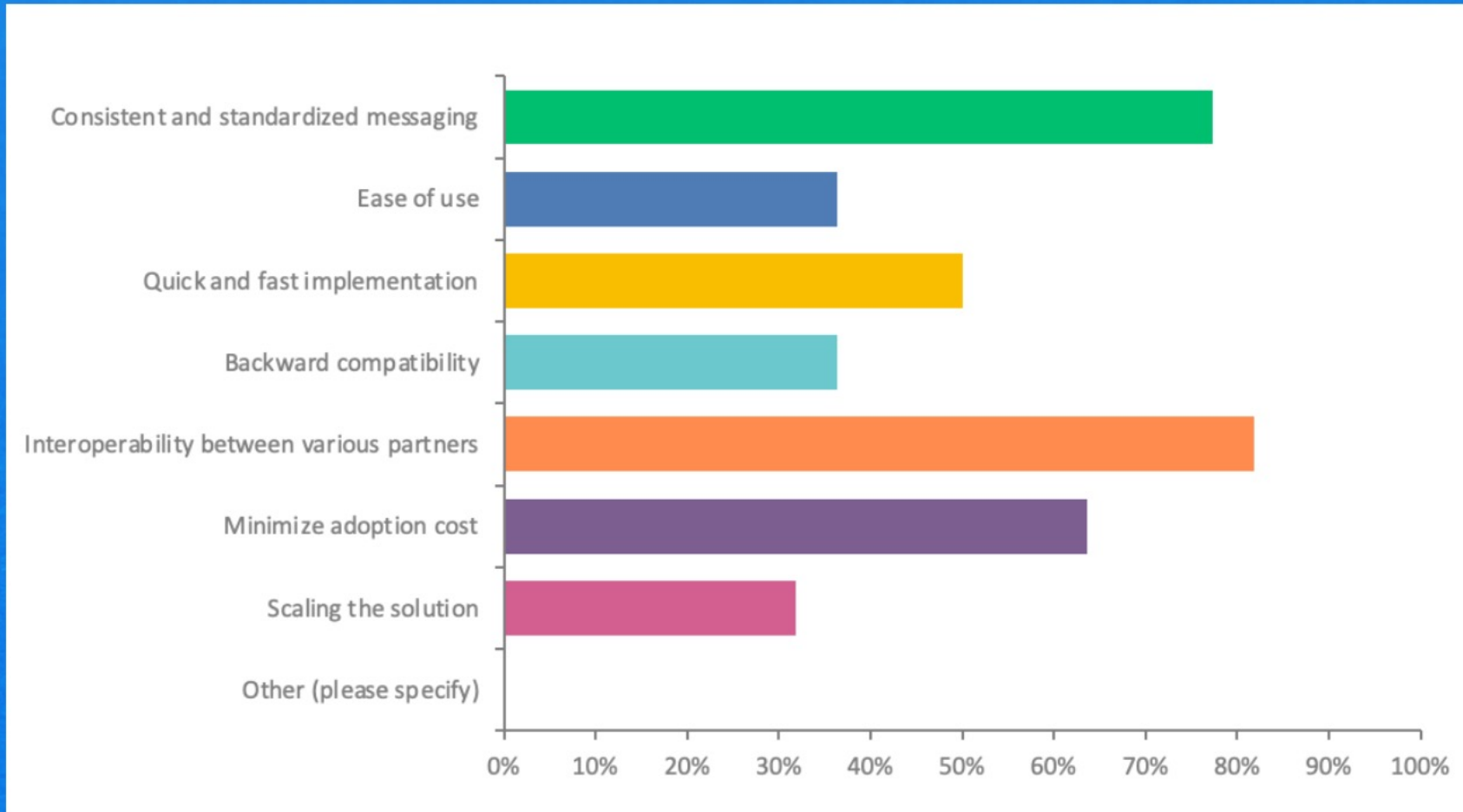


ANSWER CHOICES	RESPONSES	
Produce my own	95.00%	19
Outsource to other third-party vendors	10.0%	2
If using a third-party vendor, which do you use? (please specify)	0%	0
TOTAL		21

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 6:

WHAT ARE THE BENEFITS OF USING THE PIDX STANDARDS FOR BUYERS/OPERATORS, NETWORK PROVIDERS, SELLERS/SUPPLIERS, WHOLESALERS, TERMINAL OPERATORS, ETC? (CHECK ALL THAT APPLY)



NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 6: (CONTINUED)

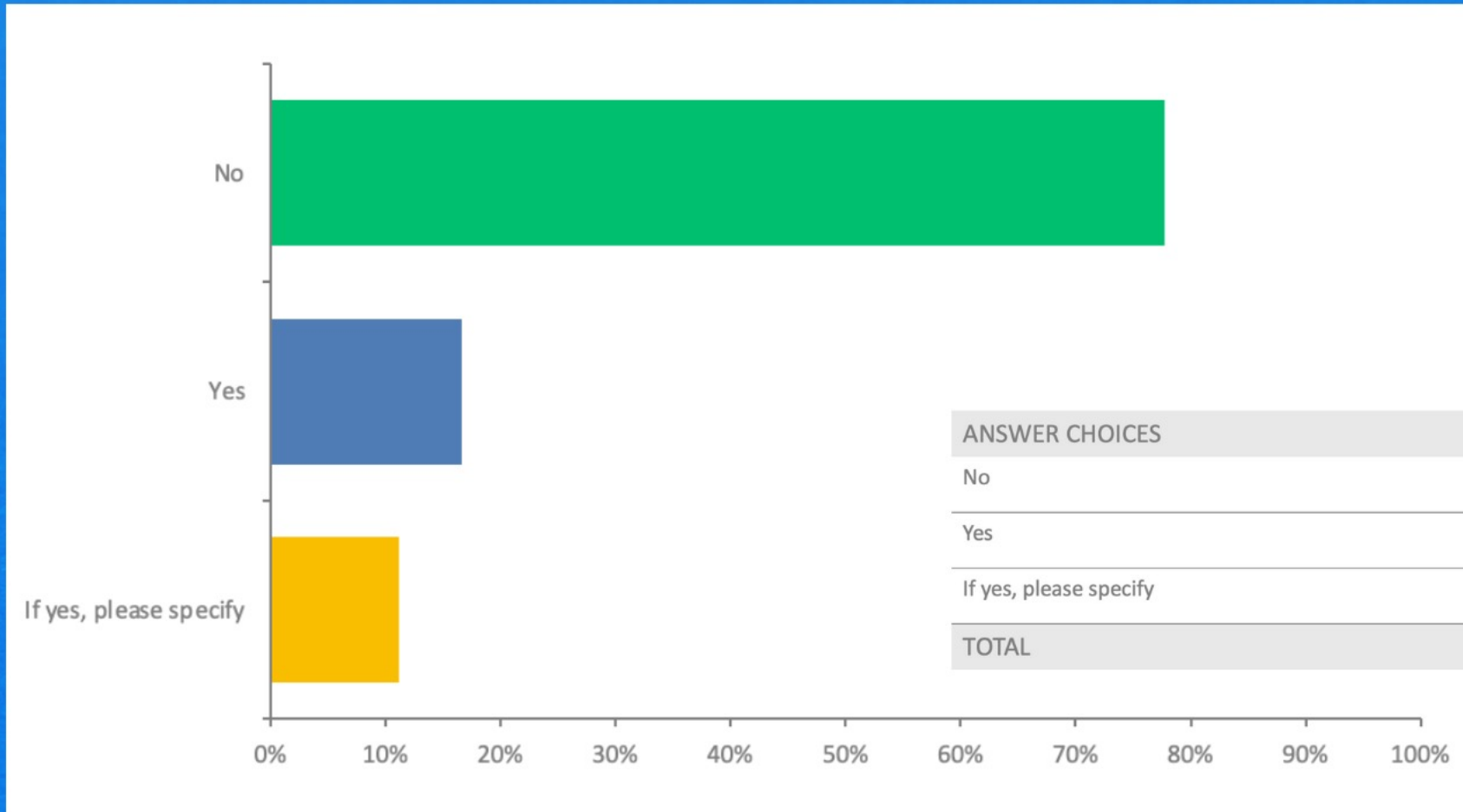
WHAT ARE THE BENEFITS OF USING THE PIDX STANDARDS FOR BUYERS/OPERATORS, NETWORK PROVIDERS, SELLERS/SUPPLIERS, WHOLESALERS, TERMINAL OPERATORS, ETC? (CHECK ALL THAT APPLY)

ANSWER CHOICES	RESPONSES	
Consistent and standardized messaging	77.27%	17
Ease of use	36.36%	8
Quick and fast implementation	50.0%	11
Backward compatibility	36.36%	8
Interoperability between various partners	81.82%	18
Minimize adoption cost	63.64%	14
Scaling the solution	31.82%	7
Other (please specify)	0%	0
TOTAL		83

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 7:

ARE THERE ANY AREAS WHERE PIDX COULD HELP DEVELOP A STANDARD FOR THE INDUSTRY?



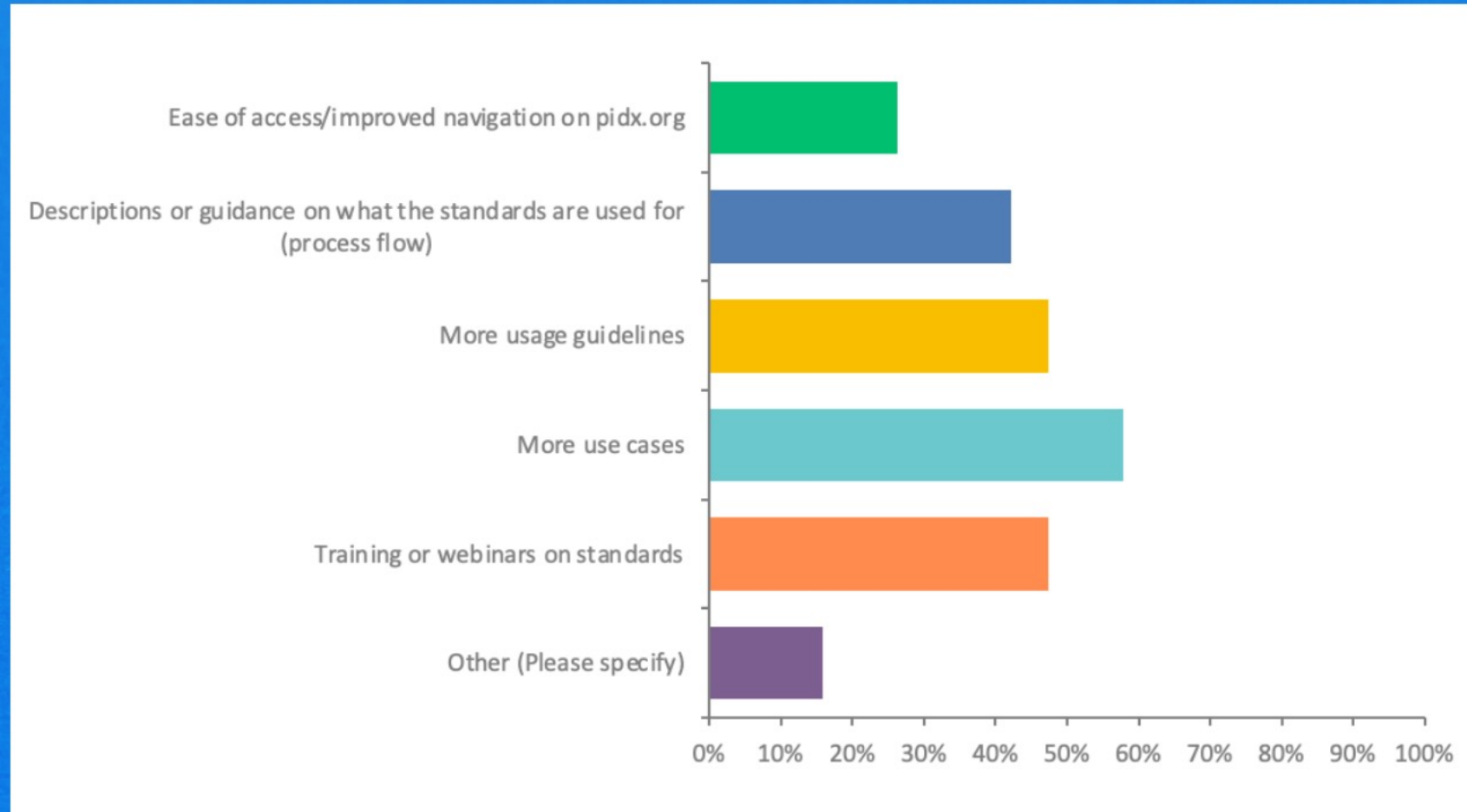
OTHER:

- MARKETING
- INVENTORY/VENDOR MANAGED INVENTORY REPORTING

ANSWER CHOICES	RESPONSES
No	77.78% 14
Yes	16.67% 3
If yes, please specify	11.11% 2
TOTAL	19

QUESTION 8:

HOW CAN EXISTING PIDX STANDARDS BE IMPROVED? (CHECK ALL THAT APPLY)



OTHER:

- PROVIDE EXAMPLES TO STAKEHOLDERS WHY PIDX IS IMPORTANT VIA TRAINING, WEBINARS AND INDUSTRY CONFERENCES
- COMPLIANCE CERTIFICATION FOR 3RD PARTY PROVIDERS
- MODERNIZE USING SOMETHING LIKE JSON.

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 8: (CONTINUED)

HOW CAN EXISTING PIDX STANDARDS BE IMPROVED? (CHECK ALL THAT APPLY)

ANSWER CHOICES	RESPONSES	
Ease of access/improved navigation on pidx.org	26.32%	5
Descriptions or guidance on what the standards are used for (process flow)	42.11%	8
More usage guidelines	47.37%	9
More use cases	57.89%	11
Training or webinars on standards	47.37%	9
Other (Please specify)	15.79%	3
TOTAL		45

OTHER:

- PROVIDE EXAMPLES TO STAKEHOLDERS WHY PIDX IS IMPORTANT VIA TRAINING, WEBINARS AND INDUSTRY CONFERENCES
- COMPLIANCE CERTIFICATION FOR 3RD PARTY PROVIDERS
- MODERNIZE USING SOMETHING LIKE JSON.

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

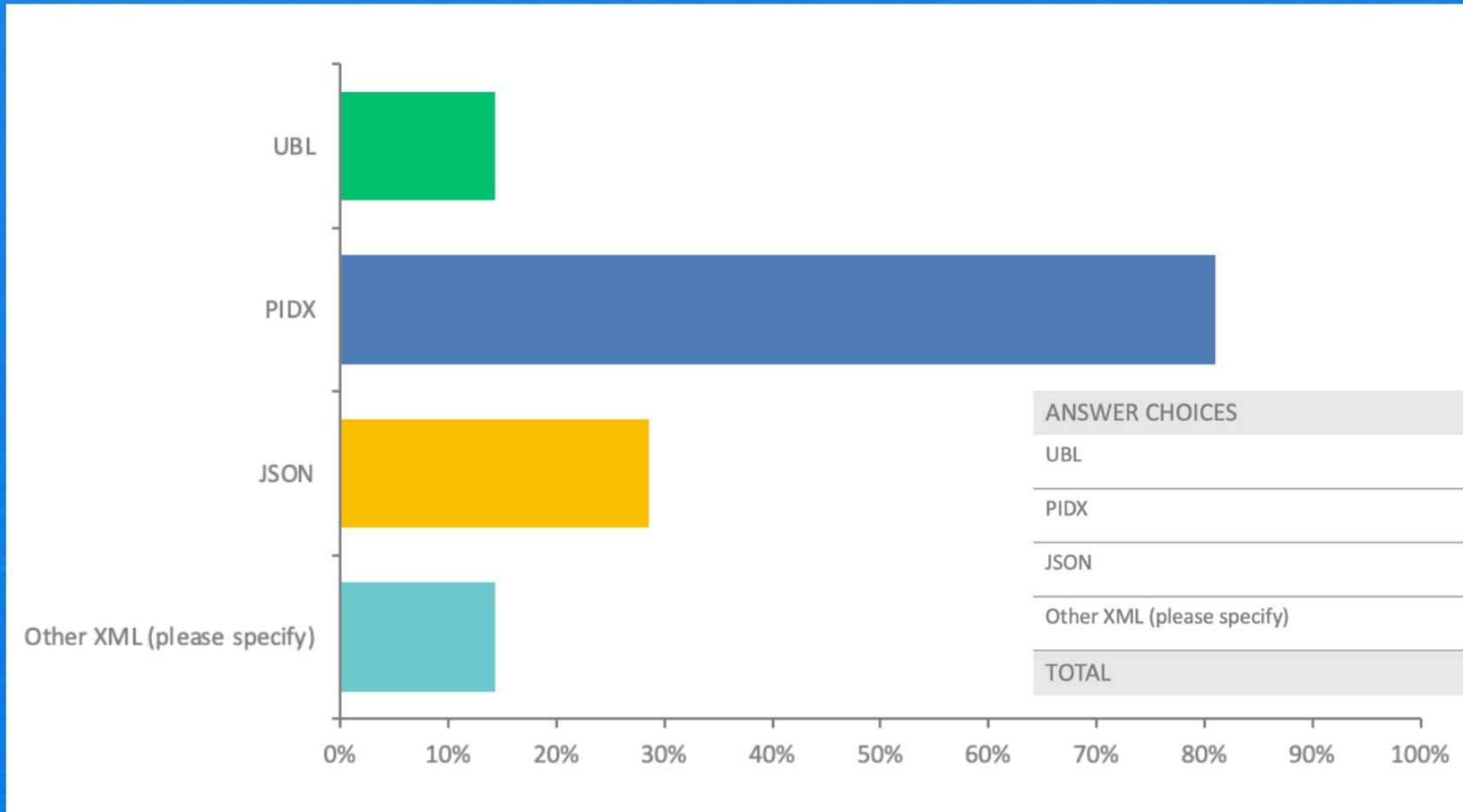
QUESTION 9:

IF YOU INDICATED CORRECTIONS ARE REQUIRED TO THE STANDARDS, PLEASE PROVIDE DETAIL BELOW:

NO REPOSSES

QUESTION 10:

WHAT ARE THE STANDARDS USED FOR YOUR B2B TRANSACTIONS DATA FORMAT?



OTHER:

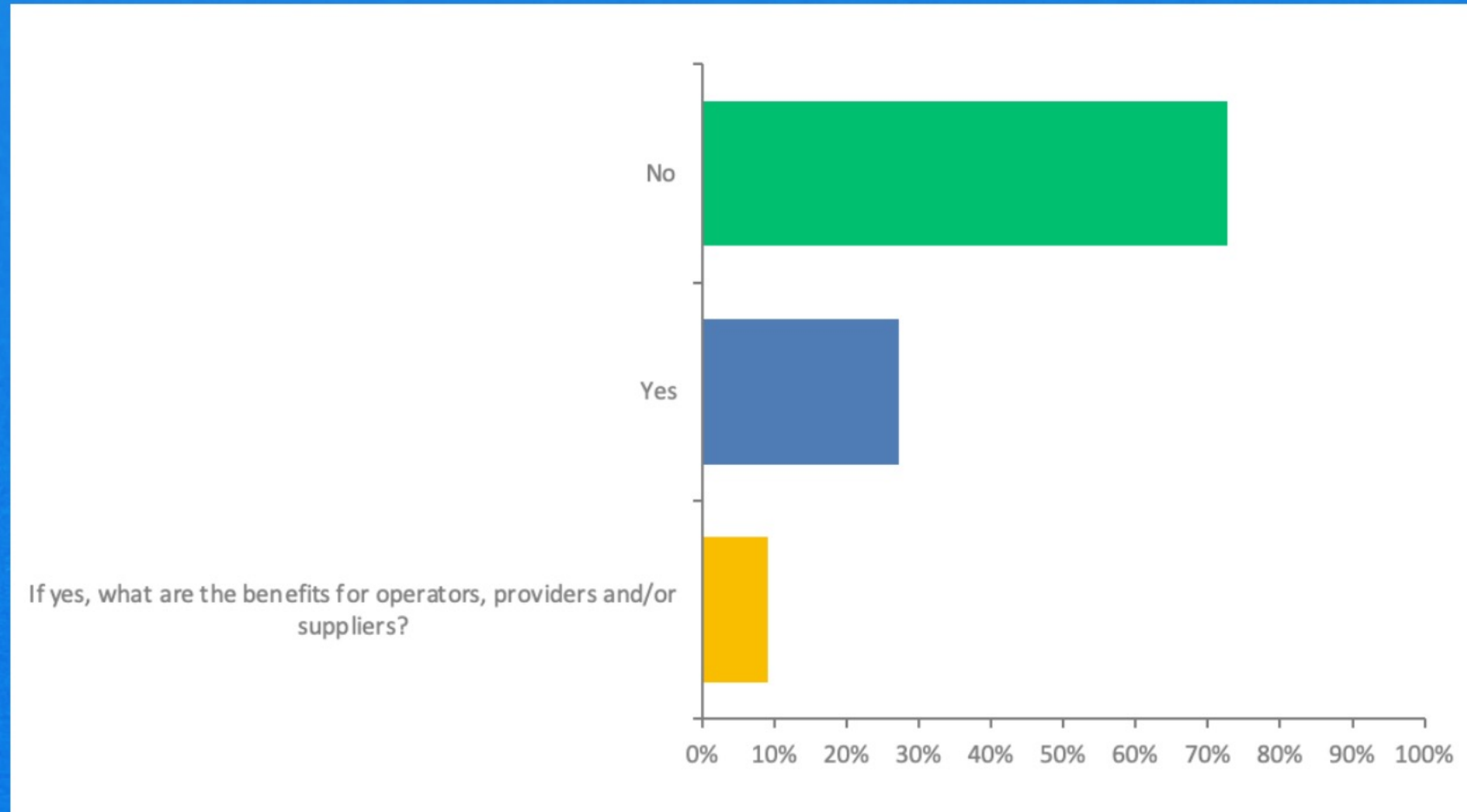
- CXML
- CXML, TXT, CSV, EDI
- WS.TXLSTD

ANSWER CHOICES	RESPONSES	
UBL	14.29%	3
PIDX	80.95%	17
JSON	28.57%	6
Other XML (please specify)	14.29%	3
TOTAL		29

NOTE: MORE THAN ONE OPTION COULD BE SELECTED FOR THIS QUESTION.

QUESTION 11:

ARE YOU AWARE OF ANY BLOCKCHAIN IMPLEMENTATIONS IN THE ENERGY INDUSTRY?



IF YES, WHAT ARE THE BENEFITS FOR OPERATORS, PROVIDERS AND/OR SUPPLIERS?

- EVERY NODE/SUPPLIER/CUSTOMER ON THE NETWORK WILL HAVE ALL THE TRANSACTION HISTORY, COPY OF THE LATEST TRANSACTIONS, BUILDS TRUST
- WE ARE WORKING ON OUR OWN SOLUTION.

QUESTION 11: (CONTINUED)

ARE YOU AWARE OF ANY BLOCKCHAIN IMPLEMENTATIONS IN THE ENERGY INDUSTRY?

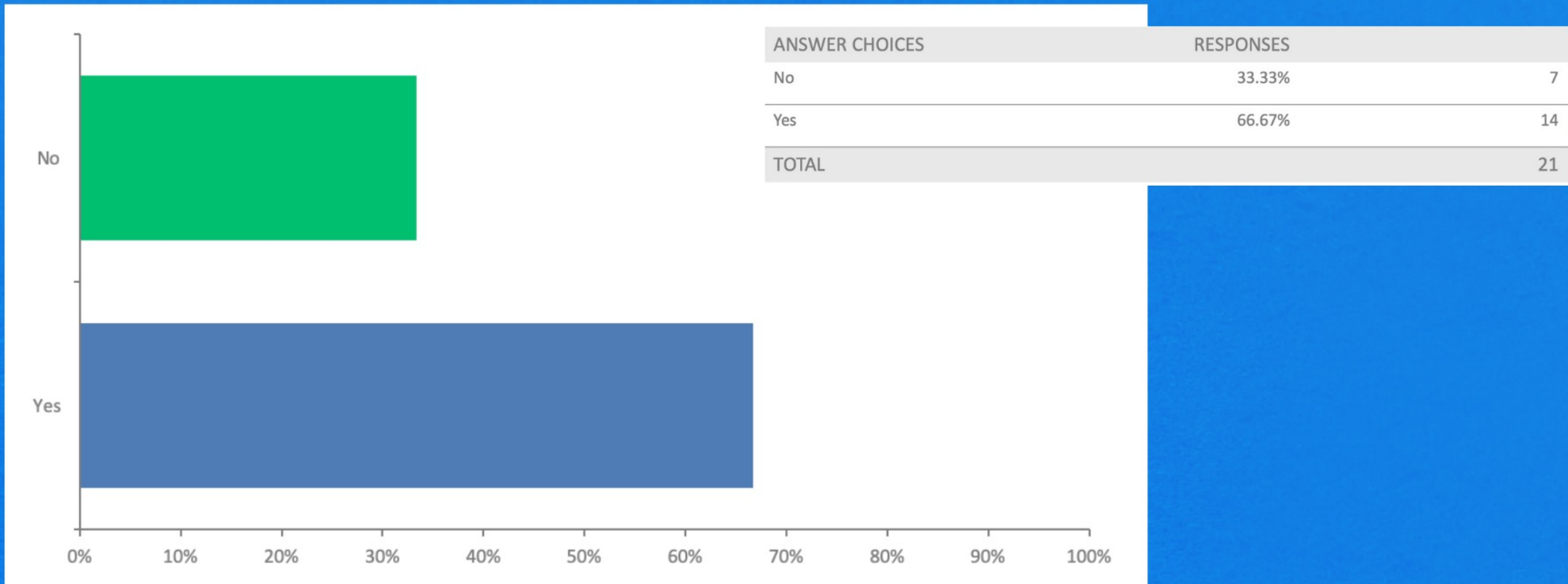
ANSWER CHOICES	RESPONSES	
No	72.73%	16
Yes	27.27%	6
If yes, what are the benefits for operators, providers and/or suppliers?	9.09%	2
TOTAL		24

IF YES, WHAT ARE THE BENEFITS FOR OPERATORS, PROVIDERS AND/OR SUPPLIERS?

- EVERY NODE/SUPPLIER/CUSTOMER ON THE NETWORK WILL HAVE ALL THE TRANSACTION HISTORY, COPY OF THE LATEST TRANSACTIONS, BUILDS TRUST
- WE ARE WORKING ON OUR OWN SOLUTION.

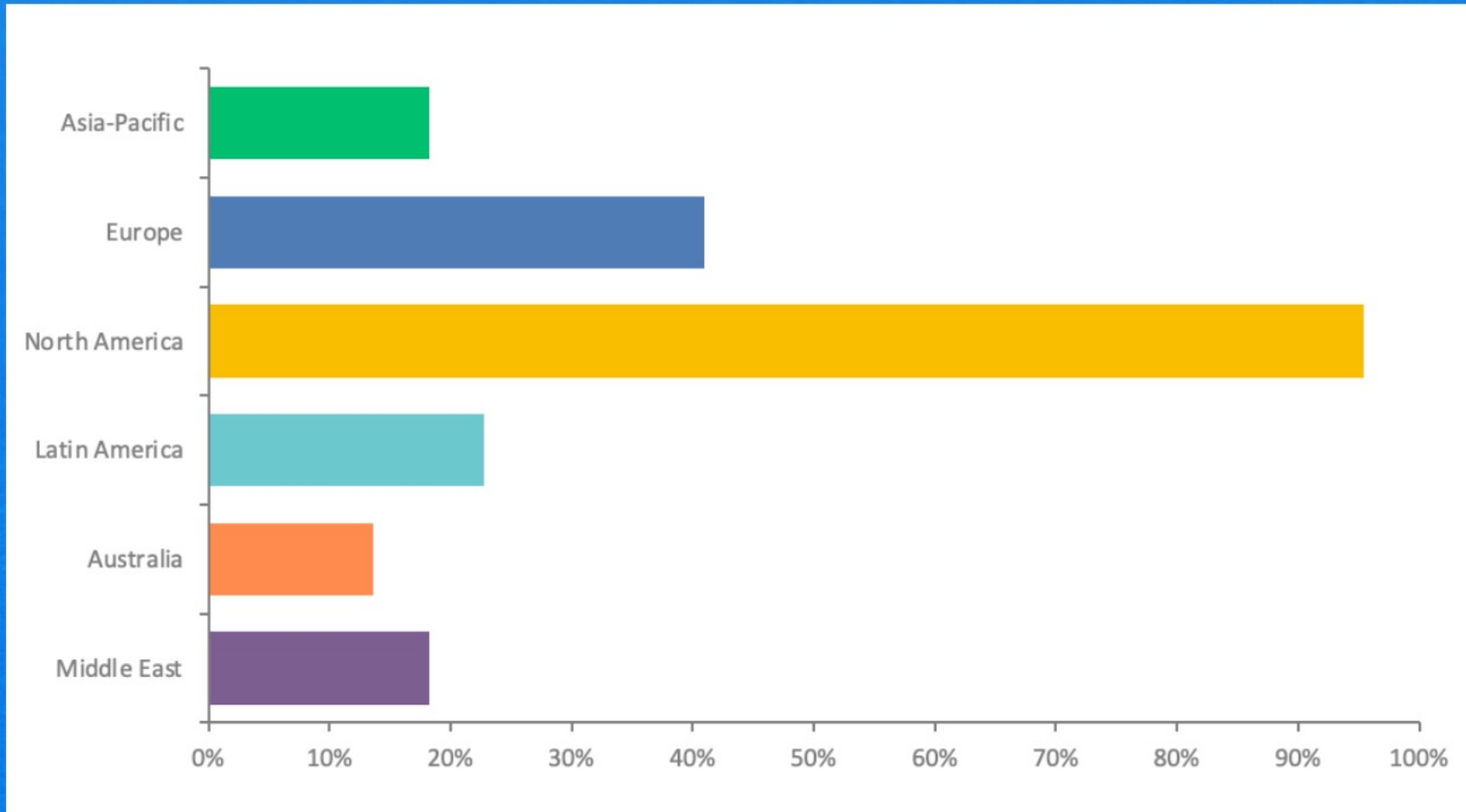
QUESTION 12:

ARE YOU AWARE THAT PIDX IS ACTIVELY DEVELOPING EMISSIONS REPORTING STANDARDS? TO LEARN MORE ABOUT THE PIDX EMISSIONS TRANSPARENCY DATA EXCHANGE, VISIT [HTTPS://PIDX.ORG/TEAMS/JOIN-A-PIDX-TEAM/](https://pidx.org/teams/join-a-pidx-team/)



QUESTION 13:

IN WHICH REGIONS ARE YOU USING PIDX STANDARDS? (CHECK ALL THAT APPLY)



NOTE: MORE THAN ONE
OPTION COULD BE
SELECTED FOR THIS
QUESTION.

QUESTION 13: (CONTINUED)

IN WHICH REGIONS ARE YOU USING PIDX STANDARDS? (CHECK ALL THAT APPLY)

ANSWER CHOICES	RESPONSES	
Asia-Pacific	18.18%	4
Europe	40.91%	9
North America	95.45%	21
Latin America	22.73%	5
Australia	13.64%	3
Middle East	18.18%	4
TOTAL		46

NOTE: MORE THAN ONE
OPTION COULD BE
SELECTED FOR THIS
QUESTION.

KEY TAKEAWAYS

- SOME STANDARDS HAVE ZERO ADOPTION, NEED TO VALIDATE THE USE CASE AND VALUE BEFORE DEVELOPING A STANDARD
- SOME PIDX SCHEMA VERSIONS ARE NOT BEING USED, EVALUATE IF THESE CAN BE ELIMINATED
- PUBLISH STANDARD USAGE GUIDELINES & USE CASES, ROLL OUT STANDARDS TRAININGS & WEBINARS
- STANDARDS MODERNIZATION - JSON
- PROMOTE USAGE OF PIDX STANDARDS IN REGIONS OUTSIDE NORTH AMERICA
- DEVELOP A SUSTAINABLE WAY TO MEASURE PIDX STANDARDS ADOPTION