| **NORTH AMERICAN ENERGY STANDARDS BOARD****2013 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT Approved by the Board of Directors on December 6, 2012** |
| --- |
|  | **Item Description** | **Completion[[1]](#endnote-1)** | **Assignment[[2]](#endnote-2)** |
| **1** | **Develop business practices standards as needed to complement reliability standards**  |
|  | Develop business practice standards to support and complement NERC reliability standards, NERC policies and NERC standards authorization requests (SARs) using the NERC/NAESB Coordination Joint Standards Development Process as appropriate. Current NAESB activities underway to develop business practice standards that are supportive of this annual plan item are:  |
|  | a) | Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection – Permanent Solution[[3]](#footnote-1) Note: Consideration should be given to provisional item 4. Work is being coordinated with the NERC IDC Working Group.Status: Started | 1st Q, 2013 | BPS |
|  | b) | Perform consistency review of WEQ-008 Transmission Loading Relief Business Practice Standards and develop recommendation.[[4]](#footnote-2) Status: Not Started  | 2013 | BPS |
|  | c) | Disturbance Control Standard (DCS) (BAL-002) Coordination with NERC [Project 2010-14.1 Phase 1 of Balancing Authority Reliability-based Controls: Reserves](http://www.nerc.com/filez/standards/Project2010-14.1_Phase_1_of_Balancing_Authority_RBC.html)Status: Monitor.  | 2013 | BPS/TIMTF |
|  | d) | Revise TLR level 5 to be treated similarly to TLR Level 3 in terms of treating the next hour allocation separately from that of current hour. ([R11020](http://www.naesb.org/pdf4/r11020.doc))Status: Not Started | 2013 | BPS |
|  | e) | Develop and or modify business practices related to support of NERC effort on the NERC Resources and Transmission Adequacy (NERC [Project 2009-05 Resource Adequacy Assessments](http://www.nerc.com/filez/standards/Resource_Adequacy.html)). Status: Not Started | TBD | BPS |
|  | f) | Develop, modify or delete business practices to support Time Error, Automatic Generation Control (AGC), and Inadvertent Accounting (BAL-005, and BAL-006) (NERC [Project 2010-14.2 Phase 2 of Balancing Authority Reliability-based Controls: Time Error, AGC, and Inadvertent](http://www.nerc.com/filez/standards/Project2010-14.2_Phase_2_of_Balancing_Authority_RBC.html)). The NERC project may impact WEQ-006 Manual Time Error Correction and WEQ-007 Inadvertent Interchange Payback.Status: Not Started | TBD | BPS |
|  | g) | Coordinate with NERC on changes to the definition of Bulk Electric System NERC [Project 2010-17 Definition of Bulk Electric System](http://www.nerc.com/filez/standards/Project2010-17_BES.html) (Phase 2). Status: Not started. Dependent on NERC completing its project. | 2013 | SRS |
| **2** | **Develop business practice standards in support of the FERC RM05-25-000 and RM05-17-000 (OATT Reform)[[5]](#footnote-3)** |
|  | a) | Develop version 2 business practice standards to better coordinate the use of the transmission system among neighboring transmission providers. Status: UnderwayRequest R050004 was expanded to include the [Order No. 890 (Docket Nos.RM05-17-000 and RM02-25-000)](http://www.naesb.org/doc_view4.asp?doc=ferc041107.pdf), ([Order No. 890-A (Docket Nos. RM05-17-001, 002 and RM05-25-001, 002](http://www.naesb.org/doc_view2.asp?doc=ferc122807.pdf)), and [Order No. 890-B (Docket Nos. RM05-17-03 and RM05-25-03)](http://www.naesb.org/pdf3/ferc062308_order890b.doc) “Preventing Undue Discrimination and Preference in Transmission Services”  |
|  |  | i) | Group 4: Pre-Emption; Request No. [R05019](http://www.naesb.org/pdf2/r05019.doc) |
|  |  |  | 1. Pre-Emption

Status: Started | 3rd Q, 2013 | OASIS |
|  |  |  | 1. Request No. [R05019](http://www.naesb.org/pdf2/r05019.doc)

Status: Started | 3rd Q, 2013 | OASIS |
|  |  | ii) | Group 6: Miscellaneous (Paragraph 1627[[6]](#footnote-4) of FERC Order No. 890) |
|  |  |  | 1. Paragraphs 1627 of Order 890 – Posting of additional information on OASIS regarding firm transmission curtailments

Status: Not Started | TBD (follows the completion of AP 1(a)) | OASIS |
|  |  |  | 1. Redispatch Cost Posting to allow for posting of third party offers of planning redispatch services.

Status: Not Started | TBD (follows the completion of AP 1(a)) | OASIS |
| **3** | **Develop business practices standards to improve the current operation of the wholesale electric market and develop and maintain business practice and communication standards for OASIS and Electronic Scheduling** |
|  | a) | Develop and/or maintain business practice standards as needed for OASIS and electronic scheduling. Specific items to address include: |
|  |  | i) | Make remaining incremental enhancements to OASIS as an outgrowth of the NAESB March 29, 2005 conference on the future of OASIS ([R05026](http://www.naesb.org/pdf2/r05026.doc)). Scoping [statement](http://www.naesb.org/pdf2/weq_srs112006a1.doc) completed by SRS. There were a number of assignments from the Standards Request. The outstanding items are included below:  |
|  |  |  | 1) | Eliminate Masking of TSR tag source and sink when requested status is denied, withdrawn refused, displaced, invalid, declined, annulled or retractedStatus: Not Started | 2013 | OASIS |
|  |  |  | 2) | Initiate standard that eliminates the disparity of posting “sensitive” information. This standard should also include procedures of user certification that allows access to this class of information.Status: Underway (upon further development of this item by NAESB, a completion date will be determined) | 2013 | OASIS |
|  |  |  | 3) | Enhance the TSR result postings to allow showing of (i) limiting transmission elements and (ii) available generation dispatch options that would allow acceptance of reservation request.Status: Not Started (upon initiation of this item by NAESB, a completion date will be determined) | 2013  | OASIS |
|  |  | ii) | Review and correct WEQ-004 Coordinate Interchange Business Practice Standard as needed based on activities in NERC [Project 2008-12, Coordinate Interchange Standards Revisions](http://www.nerc.com/filez/standards/Project2008-12_Coordinate_Interchange_Stds_Modifications.html) and supporting EOP-002-2 R4 and R6.[[7]](#footnote-5) Status: Underway. Completion date dependent upon coordination activities with NERC, and Project 2008-12 is delayed by NERC due to other higher priority development. It is expected that NERC will begin its effort in 2nd Q 2013. | 2014 | JESS |
|  | b) | Review e-Tag specifications and make modifications as needed for: |  |  |
|  |  | i) | Supporting Network Integration Transmission Service standardsStatus: Not Started | TBD | JESS |
|  |  | ii) | Consistency and clarificationsStatus: Not Started | TBD | JESS |
|  |  | iii) | Regional Implementations supporting WECC efforts (probably of most impact to the appendices in the e-Tag specifications)Status: Not Started | TBD | JESS |
|  | c) | Requirements for OASIS to use data in the Electric Industry Registry ([R12001](http://www.naesb.org/pdf4/r12001.doc))Status: Not Started | TBD | OASIS |
|  | d) | Develop Electric Industry Registry Business Practice StandardsStatus: Underway | 2013 | JESS |
| **4.** | **Develop and/or maintain standard communication protocols and cyber-security business practices as needed.** |
|  | a) | Develop modifications for WEQ-012 as needed to reflect current market conditions |  |  |
|  |  | i) | Review and develop standards as needed to support adequate session encryption (SSL/TLS issues: [US-Cert Vulnerability Note VU#864643](http://www.kb.cert.org/vuls/id/864643))Status: Not Started | 2013 | PKI |
|  |  | ii) | Review the FERC Report, “Report on Use of North American Energy Standards Board Public Key Infrastructure Standards,” Docket No. EL12-86-000, issued on August 27, 2012, to determine which standards changes are needed to be responsive to suggestions made by the Commission.[[8]](#footnote-6)Status: Not Started | 2013 | PKI |
|  |  | iii) | Review annually at a minimum, the accreditation requirements for Authorized Certification Authorities to determine if any changes are needed to meet market conditions.[[9]](#footnote-7)Status: Not Started | 2013 | PKI |
|  | b) | Review WEQ standards for impact of XML vulnerability exploits and make modifications as needed to standards and functional specificationsStatus: Not Started | TBD | PKI/JESS |
| **5** | **Maintain existing body of Version 3.x standards** |
|  | a) | Consistent with ¶51 of FERC Order No. 890-A, add AFC and TFC values to the “System\_Attribute” data element of the NAESB Standard WEQ-003: OASIS S&CP Data Dictionaries. ([R08011](http://www.naesb.org/pdf3/r08011.doc))Status: Underway | TBD | OASIS |
|  | b) | Correct WEQ 013-2.6.7.2. – Resale off OASIS ([R08027](http://www.naesb.org/../pdf4/r08027.doc))Status: Not Started | TBD | OASIS |
|  | c) | Add language to WEQ-001-4 Online Negotiation and Confirmation process to clarify Table 4-3 ([R09003](http://www.naesb.org/../pdf4/r09003.doc))Status: Started | 3rd Q, 2013 | OASIS |
|  | d) | Create a new OASIS mechanism that allows for the merger of like reservations without the use of the resale mechanism ([R09015](http://www.naesb.org/pdf4/r09015.doc))Status: Not Started | TBD | OASIS |
|  | e) | Improve transparency to allow customers to determine whether they have been treated in a non-discriminatory manner by posting of additional information on OASIS when service is denied (i.e. refused or declined) by customer(s) using new SAMTS process across multiple transmission systems to serve their NITS load on multiple systems. ([R12006](http://www.naesb.org/pdf4/r12006.doc))Status: Not Started | TBD | OASIS |
| **6.** | **Develop or modify standards to Support** [**FERC Order No. 676-E**](http://www.naesb.org/pdf4/ferc112409_order_676E.doc)**, (Docket No. RM 05-5-013)** |
|  | a) | Develop standards to support the Transmission Provider right to reassess the availability of conditional firm (See ¶ 72[[10]](#footnote-8))Status: Not Started | TBD | OASIS |

| **NORTH AMERICAN ENERGY STANDARDS BOARDPROPOSED 2013 ANNUAL PLAN for the WHOLESALE ELECTRIC QUADRANT Approved by the WEQ EC on October 23, 2012** |
| --- |
| **PROVISIONAL ITEMS** |
| 1 |  | **Develop business practices standards as needed to complement NERC reliability standards** |
|  |  |  |
|  | a) | Develop complementary standards that align with NERC [Project 2008-01 Voltage and Reactive Planning and Control](http://www.nerc.com/filez/standards/Project2008-01_Voltage_and_Reactive_Planning_and_Control.html). A SAR was finalized in April 2011.  |
|  | b) | Develop complementary standards that align with NERC Project 2010-4 Demand Data. The NERC project may impact WEQ-015 Business Practices for Measurement and Verification of Wholesale Electricity Demand Response. |
|  | c) | Coordinate with NERC on the functional model glossary revisions NERC [Project 2010-08 Functional Glossary Model Revisions](http://www.nerc.com/filez/standards/Project2010-08_FM_Glossary_Revisions.html). The NERC project may impact WEQ-000 Abbreviations, Acronyms, and Definition of Terms. |
|  | d) | Coordinate with NERC on NERC Project 2012-05 ATC Revisions - Order 729. The NERC project may impact the WEQ-001 Open Access Same-Time Information Systems (OASIS) Standards, WEQ-002 OASIS Standards and Communication Protocol (S&CP), WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, and WEQ-013 OASIS Implementation Guide. |
|  | e) | Coordinate with NERC on NERC Project 2012-08 Glossary Updates. The NERC project may impact WEQ-000 Abbreviations, Acronyms, and Definition of Terms |
|  | f) | Coordinate with NERC on NERC Project 2012-09 IRO Review. The NERC project may impact WEQ-008 Transmission Loading Relief – Eastern Interconnection Standards. |
|  | g) | Coordinate with NERC on NERC Project 2012-15 Flow Limited Paths. The NERC project may impact the WEQ-001 Open Access Same-Time Information Systems (OASIS) Standards, WEQ-002 OASIS Standards and Communication Protocol (S&CP), WEQ-003 Open Access Same-Time Information Systems (OASIS) Data Dictionary, and WEQ-013 OASIS Implementation Guide. |
|  | h) | Coordinate with NERC on [Project 2013-02 Paragraph 81](http://www.nerc.com/filez/standards/Project2013-02_Paragraph_81.html). The purpose of the project is to retire or modify FERC-approved Reliability Standard requirements that as FERC noted, "provide little protection to the reliable operations of the BES", are redundant or unnecessary, or to retire or modify a FERC-approved Reliability Standard requirement to increase the efficiency of the ERO’s compliance programs. The project is expected to be implemented in multiple phases. |
|  | i) | Coordinate with NERC on Project 2013-01 Cold Weather Preparedness. The purpose of this project is to Modify existing or create new standards to address problems identified during the Southwest Cold Weather Event.[[11]](#footnote-9) |
| 2 |  | **Gas/Electric Coordination** |
|  | a) | Conduct assessment to determine if Electric Industry Requirements documented in WEQ-011 Gas / Electric Coordination should be considered reliability requirements and transition to NERC. |
|  | b) | As provided for the GEH Report approved by the Board of Directors on September 20, 2012, (<http://www.naesb.org/pdf4/bd092012a1.pdf>), which was initiated by the NPC Report[[12]](#footnote-10), review and develop standards or modify existing standards as needed for market timelines and coordination of scheduling. |
|  | c) | As provided for the GEH Report approved by the Board of Directors on September 20, 2012, (<http://www.naesb.org/pdf4/bd092012a1.pdf>), which was initiated by the NPC Report[[13]](#footnote-11), review and develop standards or modify existing standards as needed for flexibility in scheduling. |
|  | d) | As provided for the GEH Report approved by the Board of Directors on September 20, 2012, (<http://www.naesb.org/pdf4/bd092012a1.pdf>), which was initiated by the NPC Report[[14]](#footnote-12), review and develop standards or modify existing standards as needed for provision of information. |
| 3 |  | **Optional work to extend existing standards** |
|  | a) | Prepare recommendations for future path for TLR[[15]](#footnote-13) (Phase 2) in concert with NERC, which may include alternative congestion management procedures[[16]](#footnote-14). Work on this activity is dependent on completing 2010 WEQ Annual Plan 1.a (Parallel Flow Visualization/Mitigation for Reliability Coordinators in the Eastern Interconnection - Phase 1). |
|  | b) | Develop needed business practice standards for organization/company codes for NAESB standards – and address current issues on the use of DUNs numbers. Common code usage is linked to the transition of the Registry from NERC to NAESB. |
|  | c) | Develop business practices for allocating capacity among requests received during a submittal window Order 890-A [(Docket Nos. RM05-17-001, 002 and RM05-25-001, 002](http://www.naesb.org/doc_view2.asp?doc=ferc122807.pdf) - Paragraph 805)[[17]](#footnote-15). |
| 4 |  | **Pending Regulatory or Legislative Action** |
|  | a) | Determine NAESB action needed to support FERC Action Plan for Smart Grid Technology. |
|  | b) | Develop business practice standards for cap and trade programs for greenhouse gas. |
|  | c) | Develop standards as needed based on FERC Order No. 1000. ([NAESB Analysis of FERC Order No. 1000](http://www.naesb.org/pdf4/ferc_order1000_100311mn.doc)) |
|  | d) | Develop standards as needed in support of Variable Energy Resources (VERs) final order (RM10-11-000). ([NAESB Comments 3-2-11](http://www.naesb.org/pdf4/naesb_comments_ver_integration_nopr_030211.pdf), [FERC NOPR RM10-11-000](http://www.naesb.org/pdf4/ferc_111810_vers_nopr.doc), [FERC Final Order No. 764, Docket No. RM10-11-000](http://www.ferc.gov/whats-new/comm-meet/2012/062112/E-3.pdf)[[18]](#footnote-16)) |

**Wholesale Electric Quadrant Executive committee and Subcommittee Structure**

Wholesale Electric Quadrant

Executive Committee (WEQ EC)

Standards Review Subcommittee (SRS)

Interpretations Subcommittee

OASIS Subcommittee

Joint Electric Scheduling Subcommittee (JESS)

Scoping

Task Forces & Working Groups

Development

PKI Subcommittee

REQ/WEQ DSM-EE Subcommittee

Business Practices Subcommittee (BPS)

WEQ/REQ Smart Grid Standards Subcommittee (\*\*)

WEQ/REQ PAP 10 Smart Grid Standards Subcommittee (\*\*\*)

**NAESB WEQ EC and Active Subcommittee Leadership**:

Executive Committee (EC): Kathy York (Chair) and James Castle (Vice Chair)

Standards Review Subcommittee (SRS): Narinder Saini, Ed Skiba

Interpretations Subcommittee: Ed Skiba

Business Practices Subcommittee (BPS) & Time and Inadvertent Management Task Force (TIMTF): Ed Skiba, Narinder Saini

Open Access Same Time Information System (OASIS) Subcommittee: Paul Sorenson, J.T. Wood, Alan Pritchard

Joint Electric Scheduling Subcommittee (JESS): Bob Harshbarger (NAESB), Clint Aymond (NERC)

Public Key Infrastructure (PKI) Subcommittee: Jim Buccigross

Inactive Subcommittees:

e-Tariff Joint WEQ/WGQ Subcommittee (e-Tariff): Jane Daly (WEQ), Keith Sappenfield (WGQ)

Demand Side Management-Energy Efficiency (DSM-EE) REQ/WEQ Subcommittee: Ruth Kiselewich (Retail), Roy True and Paul Wattles (WEQ)

(\*\*) The Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS (Organization for the Advancement of Structured Information Standards, not Open Access Same Time Information Systems related to NAESB standards and FERC actions), CalConnect, FIX and UCAIug, among others. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the WEQ and REQ ECs.

(\*\*\*) The PAP 10 Smart Grid Standards Subcommittee is a joint group of the retail electric and wholesale electric quadrants with other standards development groups such as OASIS, UCAIug, OpenADE, ZigBee, ASHRAE, EIS Alliance, NARUC and includes other groups. Direction may be given from NIST, DoE or FERC and the group reports jointly to the NAESB Board Smart Grid Strategic Steering Committee and the WEQ and REQECs.

1. **End Notes WEQ 2013 Annual Plan:**

 Dates in the completion column are by end of the quarter for completion by the assigned committee, sub-committee or task force. The dates do not necessarily mean that the standards are fully staffed to be implementable by the industry, and/or ratified by membership. If one item is completed earlier than planned, another item can begin earlier and possibly complete earlier than planned. There are no begin dates on the plan. [↑](#endnote-ref-1)
2. The assignments are abbreviated. The abbreviations and sub-committee structure can be found at the end of the annual plan document. [↑](#endnote-ref-2)
3. See AP Item 3.iv., Completion dates may be revisited contingent upon NERC-NAESB coordination of implementation related to parallel flow visualization [↑](#footnote-ref-1)
4. In some sections of WEQ 008 it appears that the standards are applicable to all of the Interconnections and other it appears that the standards are only applicable to the Eastern Interconnection. The title indicates the standards are applicable to the Eastern Interconnection. [↑](#footnote-ref-2)
5. FERC Order No. 890, issued February 16, 2007 can be accessed from the following link - http://www.naesb.org/doc\_view4.asp?doc=ferc021607.doc [↑](#footnote-ref-3)
6. Paragraph 1627 of FERC Order No. 890, issued February 16, 2007: We agree with suggestions for the posting of additional curtailment information on OASIS and, therefore, require transmission providers, working through NAESB, to develop a detailed template for the posting of additional information on OASIS regarding firm transmission curtailments. Transmission providers need not implement this new OASIS functionality and any related business practices until NAESB develops appropriate standards. These postings must include all circumstances and events contributing to the need for a firm service curtailment, specific services and customers curtailed (including the transmission provider’s own retail loads), and the duration of the curtailment. This information is in addition to the Commission’s existing requirements: (1) when any transmission is curtailed or interrupted, the transmission provider must post notice of the curtailment or interruption on OASIS, and the transmission provider must state on OASIS the reason why the transaction could not be continued or completed; (2) information to support any such curtailment or interruption, including the operating status of facilities involved in the constraint or interruption, must be maintained for three years and made available upon request to the curtailed or interrupted customer, the Commission’s Staff, and any other person who requests it; and, (3) any offer to adjust the operation of the transmission provider’s system to restore a curtailed or interrupted transaction must be posted and made available to all curtailed and interrupted transmission customers at the same time. [↑](#footnote-ref-4)
7. See AP Item 1.a.iv, Completion dates may be revisited contingent upon NERC-NAESB coordination of implementation related to parallel flow visualization. [↑](#footnote-ref-5)
8. The FERC Report may be found at: http://www.ferc.gov/EventCalendar/Files/20120827175825-EL12-86-000.pdf [↑](#footnote-ref-6)
9. The “[NAESB Accreditation Requirements for Authorized Certification Authorities](http://www.naesb.org/pdf4/certification_specifications.docx)” can be found at: <http://www.naesb.org/pdf4/certification_specifications.docx> [↑](#footnote-ref-7)
10. 72. However, we reiterate here the Commission’s finding in Order No. 890 that a transmission provider is permitted to extend its right to reassess the availability of conditional firm service. Since the Version 002.1 Standards do not specifically address this issue, we would ask the industry, working through NAESB, to continue to look at additional business practice standards facilitating a transmission provider’s extension of its right to perform a reassessment [↑](#footnote-ref-8)
11. The “Report on Outages and Curtailments During the Southwest Cold Weather Event of February 1-5, 2011” can be found at http://www.ferc.gov/legal/staff-reports/08-16-11-report.pdf [↑](#footnote-ref-9)
12. Review and develop standards as needed and requested based on the National Petroleum Council (NPC) findings as communicated by the NAESB Board of Directors, government agencies or reliability organizations, as applicable. (9-15-11 NPC Report: http://www.npc.org/NARD-ExecSummVol.pdf) [↑](#footnote-ref-10)
13. Id. [↑](#footnote-ref-11)
14. Id. [↑](#footnote-ref-12)
15. Phase 2 of the Parallel Flow Visualization looks at developing options for and reporting of the most cost effective alternatives to achieve curtail obligations assigned during Phase 1.” [↑](#footnote-ref-13)
16. For additional information, please see comments submitted by PJM and Midwest ISO for this Annual Plan Item: <http://www.naesb.org/pdf3/weq_aplan102907w1.pdf>. [↑](#footnote-ref-14)
17. 805. The Commission recognizes that developing methods to allocate capacity among requests received during a submittal window may require detailed procedures, particularly when transmission requests received simultaneously exceed available capacity. As the Commission explained in Order No. 890, however, we believe that each transmission provider is in the best position to develop allocation procedures that are suitable for its system. This does not preclude transmission providers from working through NAESB to develop standardized practices, as suggested by Southern. For example, as we pointed out in Order No. 890, allocation methods such as that used by PJM to allocate monthly firm point-to-point transmission service could provide useful guidance in developing general allocation procedures. [↑](#footnote-ref-15)
18. For FERC Final Order No. 764, Docket No. RM10-11-000, specifically paragraph nos. 146 and 182 should be reviewed:

146. The Commission concludes that an independent review of NERC standards and NAESB business practices is not necessary prior to the implementation of intra-hour scheduling. As noted by NERC, several entities currently offer intra-hour scheduling without any apparent conflict with Reliability Standards. NERC comments that it does not believe there are any existing standards that prohibit industry from implementing intra-hour scheduling, and no commenters have pointed to specific NAESB business practices that prevent industry from implementing intra-hour scheduling. The Commission therefore concludes that it is not necessary to delay adoption of the intra-hour scheduling requirements of this Final Rule pending further review of NERC Reliability Standards and NAESB business practices. To the extent industry believes it is beneficial to refine one or more existing NERC Reliability Standards or NAESB business practices to reflect intra-hour scheduling, stakeholders can use existing processes to pursue such refinements.

182. Some commenters request that the Commission standardize protocols for reporting meteorological or forced outage data required by this Final Rule. The Proposed Rule did not contain standard protocols for data reporting and, as a result, the merits of such a requirement have not been fully addressed in the record.  Whether standardization of data communications would facilitate or hinder development of power production forecasting may implicate a variety of data and communications issues that would benefit from broad industry input through standards development processes such as those used by NAESB and other organizations. [↑](#footnote-ref-16)