

EPA Moderated Transaction System (EMTS)

U.S. Environmental Protection Agency
Office of Transportation and Air Quality
February 25th, 2009

What will we discuss?

- Background on RFS and EISA
- Why are we are developing the EPA Moderated Transaction System (EMTS)?
- Overview of the EMTS
- Introduction to XML
- Design Considerations
- Future Outreach

Background on RFS and EISA

EMTS - Background on RFS

- EPA, under the Energy Policy Act of 2005, was responsible for promulgating regulations to ensure that a minimum volume of renewable fuel is used as motor vehicle fuel in United States
- The resulting RFS program required that renewable fuel use would increase to a minimum of 7.5 billion gallons by 2012
- The RFS program was developed in collaboration with refiners, renewable fuel producers, and many other stakeholders

EMTS - Background on EISA

- The Energy Independence and Security Act of 2007 (EISA) sets new renewable fuels requirements and increases the volume of renewable fuel to 36 billion gallons by 2022
 - RFS 2008 requirement – 9 billion gallons (7.76%)
 - RFS 2009 requirement – 11.1 billion gallons (10.21%)
- EISA sets four separate renewable fuel standards
 - Cellulosic Ethanol – 16 billion gallons by 2022
 - Biomass-Based Diesel – 1 billion gallons by 2022
 - Advanced Biofuel – 4 billion additional gallons by 2022
 - Conventional Biofuel – up to 15 billion gallons by 2022

EMTS - Background on EISA (cont.)

- EISA introduces production and feedstock requirements
 - Lifecycle GHG thresholds for each category of renewable fuel
 - Restricts renewable fuel feedstocks and land that feedstocks can come from
- Annual standards apply to diesel in addition to gasoline and nonroad fuel in addition to highway fuel
 - Possibility for renewable fuel to count when used as heating oil, boiler fuel, and jet fuel. (i.e. RINs might not have to be retired)

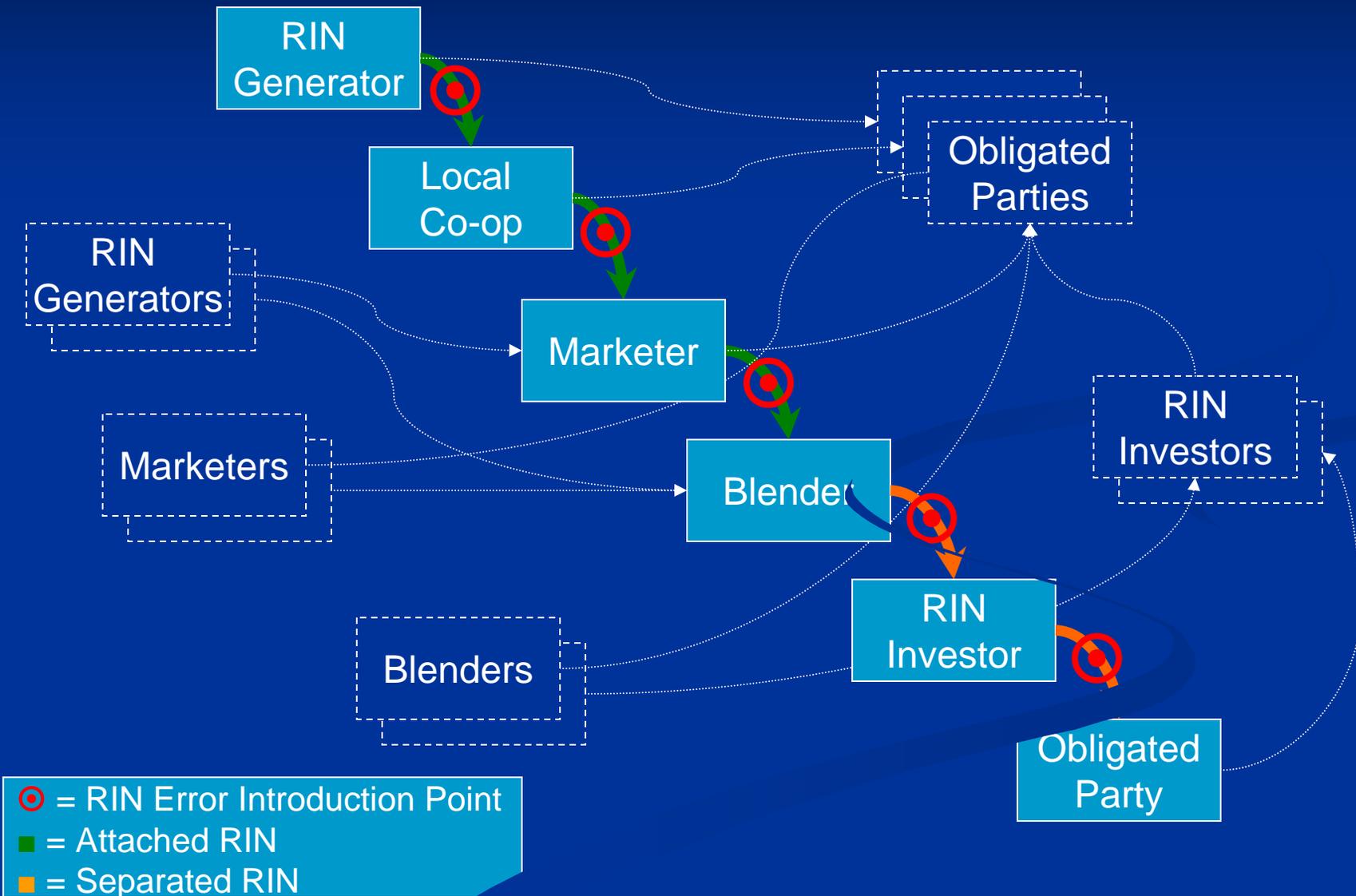
**Why are we developing
the EPA Moderated
Transaction System
(EMTS)?**

RFS Reporting: What we have seen

- Approximately 2000 parties are currently regulated under RFS
 - About 1600 are new submitters
 - Reporting errors are farther-reaching than anticipated
- 38-digit RIN is confusing
 - Administrative Errors
 - Typos and number transposition
 - Regulated community uses a mix of manual and automated processing
 - Mishandling
 - RINs generated incorrectly
 - Transfer of the same RIN to multiple parties
 - Improper error correction methods - recalling RINs and substituting other RINs that may already belong to another party
 - Result is potentially invalid RIN

Existing RIN Trading System

Example of a daisy chained ownership path and points where errors may be introduced



Complex EISA Requirements

- Need to address administrative and processing problems related to the 38-digit RIN.
- Eliminate duplicate RINs.
- Ability to instantly check reports for formatting errors to prevent future resubmissions.
 - Ability for instant feedback to reporting parties on submissions.
- Ability for submitters to verify transactions.
- The aggressive renewable volume requirements may lead to tight RIN markets and may create a need for EPA to assess the RIN market on a day to day basis.
- Must promote confidence in the RIN market.
- New EISA provisions, including four separate renewable standards and GHG requirements, have identified a need for a centrally managed reporting system.
- RIN generation and transactions will be reported on a more real time basis.
- However, a Notice of Proposed Rulemaking (NPRM) has not been published.
 - Comments received may impact the design of the final system.

Overview of the EMTS

Overview of the EMTS

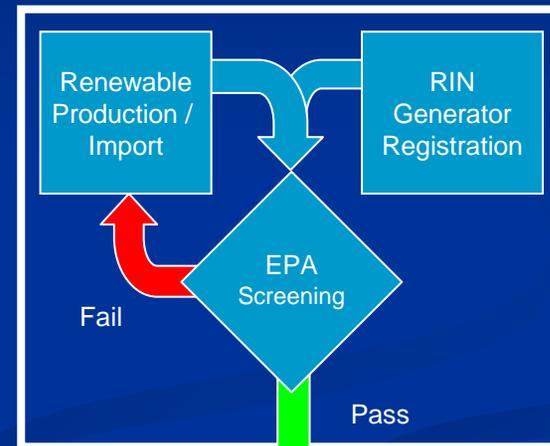
- EPA Monitored Transaction System (EMTS) is defined as: a closed, EPA-managed system that provides a mechanism for screening and tracking RIN credits
 - EMTS will not provide “matchmaking” in the market, but instead act as an accounting system to bring integrity to the market
- Anticipate retaining basic RIN handling requirements from the original RFS
 - Transactions involving attached RIN credits must be accompanied by renewable volume
 - The act of separating RIN credits may only be performed by an obligated party, a renewable blender, a renewable exporter, a seller of neat renewable fuel, etc.
 - RIN credits have a two year life – the year in which the RIN credit is generated, plus one year
 - RIN credits may continue to be traded through February 28th of their third year in order to be used for the prior calendar year’s RVO.
 - Compliance reporting, except RIN use, will remain separate from the EMTS system
 - The RFS program will continue to be supplemented by recordkeeping and attest requirements
 - Product Transfer Documents (PTDs) will still be required.
 - Possible PTD Language for RIN Credits may be referenced as:
10,000 Separated, 2008, cellulosic, RIN credits

Overview of the EMTS (cont.)

- Reporting for, and the methods of, generating and transferring RIN credits will be altered to implement a continuous reporting system
- Continuous reporting means: RIN credit generation and transactions submissions will be required sooner than in RFS; it is not likely that we will continue to allow monthly RIN credit generation
- Four basic types of RIN credits; RIN bins (i.e. accounts)
 - Cellulosic Biofuel
 - Biomass-Based Diesel
 - Other Advanced Biofuel
 - Other Renewable Fuel (corn ethanol)
 - Additional indicators or separate accounts to distinguish Attached RINs from Separated RINs
 - Additional indicators or separate accounts to convey RIN year information

Overview of the EMTS (cont.)

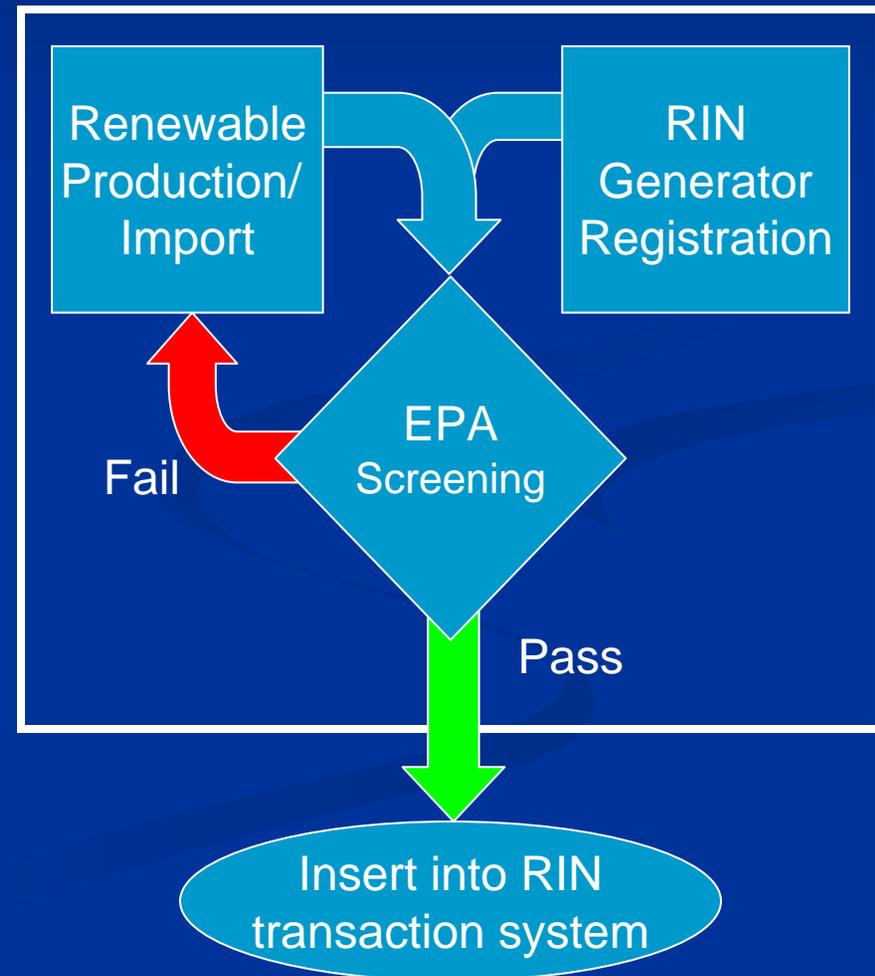
- EPA Monitored – creates an environment to track the universe of RIN credits; RIN credits are not permitted to exist outside of this environment
- Two-part continuous reporting system
 - First, screen renewable batches and the generation of RIN credits for renewable fuel produced or imported
 - Second, insert RINs into the structured RIN environment and moderate RIN transactions between the various buyers and sellers through the enforcement of business rules



Overview of the EMTS: RIN Screening

- RIN generation qualification will be determined through a new facility registration process
- A screening template will be compiled for each facility via OTAQ's registration system (OTAQReg)
- A renewable fuel producer/importer submits a batch report for volume produced or imported. This is treated as a request to create RINs and introduce them into market
- OTAQ automated system will run a screening routine on each batch and either reject the RINs or allow them to pass into the RIN transaction system

RIN Screening - EPA EMTS

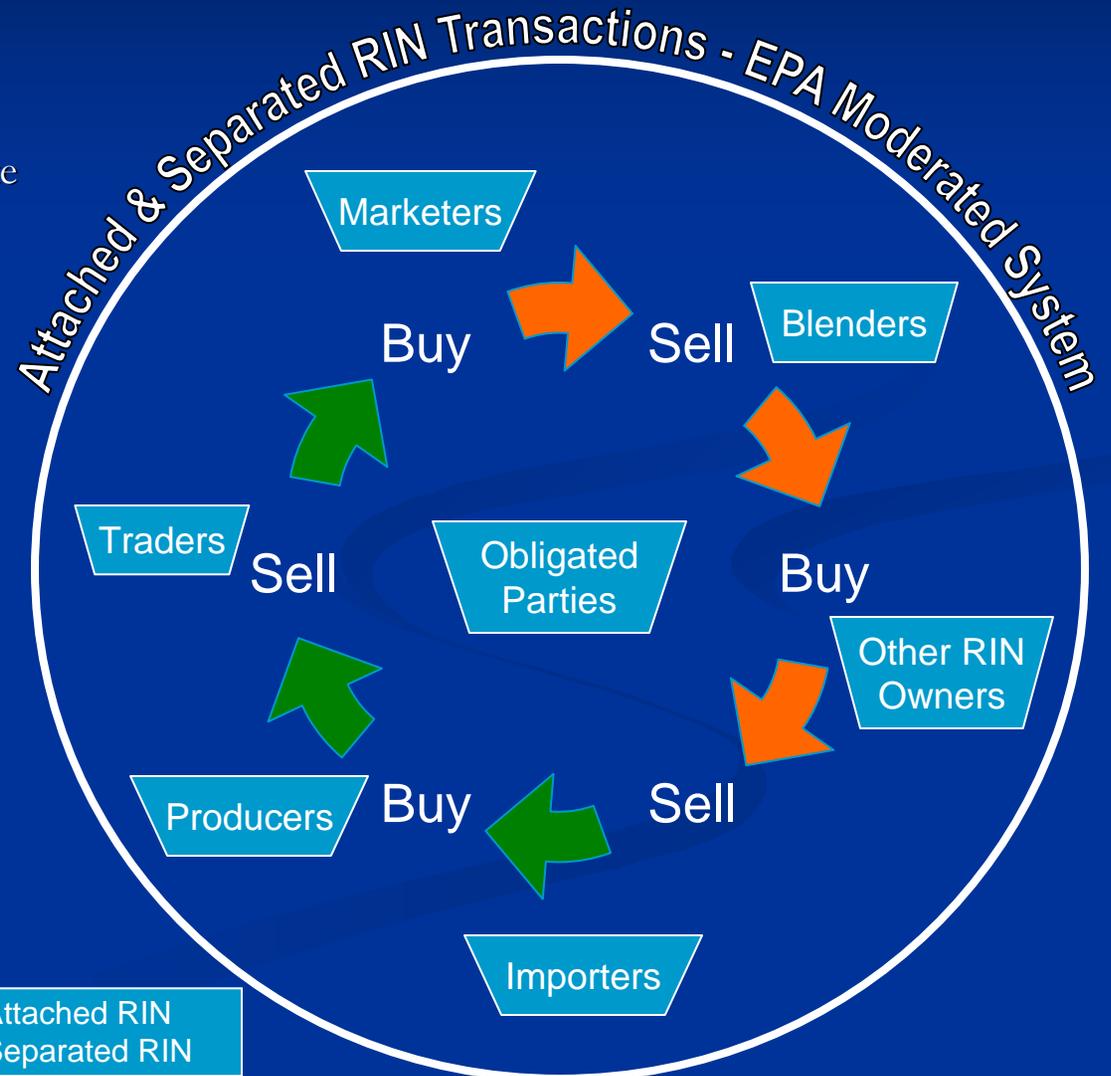


Overview of the EMTS: Registration Interaction

- Currently all Company/Facility/Submitter registration is through the “OTAQ: Fuels Programs Registration” (OTAQReg) on Central Data Exchange (CDX)
- We anticipate the expansion of OTAQReg to include specific facility information such as:
 - Process information
 - Feedstock information
- Plans to have the OTAQReg system send information to the EMTS which will in turn enable capabilities for certain users

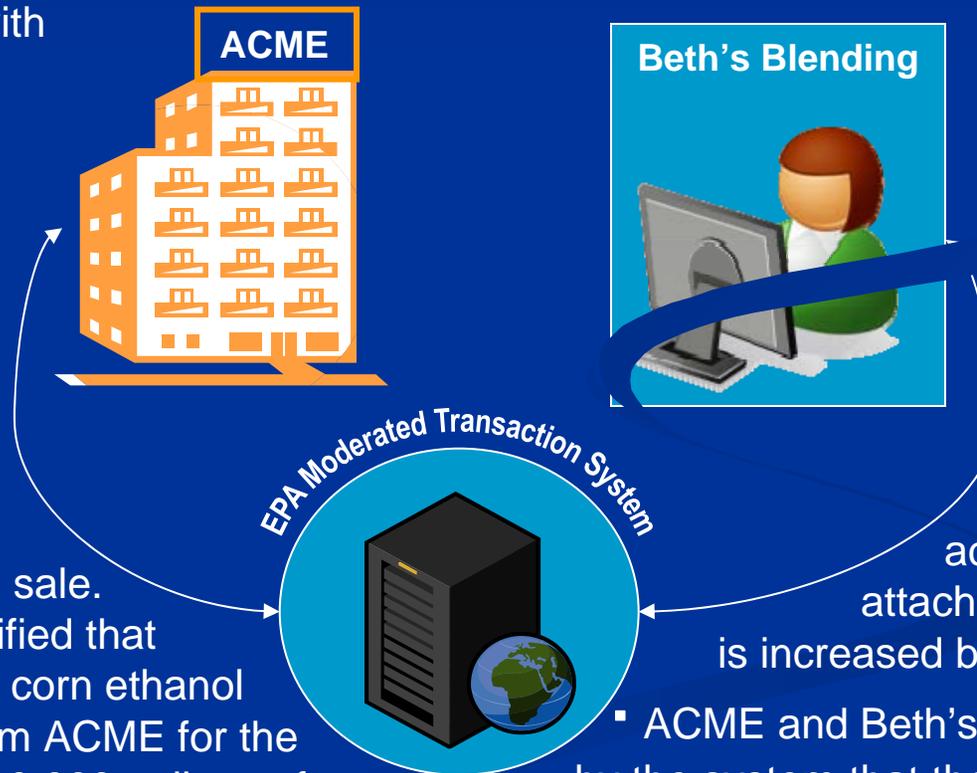
Overview of the EMTS: RIN Transactions

- Majority of RFS reporting is for RIN credit transactions
 - Used to document trades between buyers and sellers
 - Obligated parties use to demonstrate compliance with an RVO
 - Exporters use to demonstrate compliance with an export RVO
- Integrated, continuous, reporting system for managing RIN credit transactions
 - Registration will be required to establish individual RIN accounts
 - System will manage accounts for individual parties
 - Seller account is reduced immediately when transaction is posted
 - Buyer acknowledges transaction
 - Buyer account credited when buy transaction is accepted
 - Transactions are limited to RIN credits available



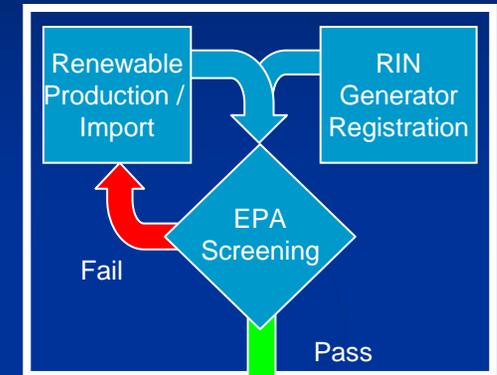
Overview of the EMTS: Sample RIN Transaction

1.
 - ACME reports sales to the EPA system including 10,000 2008 attached Other Renewable Fuel (corn ethanol) RINs to “Beth’s Blending” with 10,000 gallons of ethanol.
2.
 - ACME’s account for 2008 attached corn ethanol RINs is reduced by 10,000 with the posting of the sale.
 - Beth’s Blending is notified that 10,000 2008 attached corn ethanol RINs are available from ACME for the transaction involving 10,000 gallons of ethanol.
3.
 - Beth logs on to the transaction system, sees that a transaction is pending her action, and acknowledges that 10,000 gallons of ethanol were received from ACME with 10,000 2008 attached corn ethanol RINs, by clicking “accept transfer.”
4.
 - Beth’s Blending account for 2008 attached corn ethanol RINs is increased by 10,000.
 - ACME and Beth’s Blending are notified by the system that the transaction is complete.



Overview of the EMTS: Benefits

-  Single point where errors can be introduced; eliminates the daisy chain
 - Significant reduction in potential for errors; a necessity given the four RIN categories in EISA
- Potential to reduce or streamline recordkeeping and PTD requirements (incorporate transaction confirmation IDs)
- Simplified mechanism for rectifying errors and processing corrections
- EPA plans to have instantaneous access to data
 - Screening - system will provide instantaneous access to data - renewable products, production volumes, feedstock use, etc.
 - Feedback - transactional information can provide the number of RINs available by party type, type of RIN, etc.



Introduction to XML

Overview of the EMTS: Highlights

New

- New technologies
 - XML file reporting
 - No more Excel or CSV for generation and transactions
- Exchange Network
 - Node to Node Capabilities
- Expanded registration requirements

Unchanged

- Most recordkeeping requirements stay the same
- Annual attest engagements
- PTD requirements
 - No standardized PTDs
 - BOL, invoice, etc.

What is XML?

- XML stands for Extensible Markup Language
- XML is for structuring data
- XML provides guidelines for arranging the text to structure the data
- XML enables computers to generate data, read data, and pass data to other systems
- **XML Schemas** describe the type of XML file, applying constraints on the structure and content.

Example of XML

XML Schema Example

XML File Example

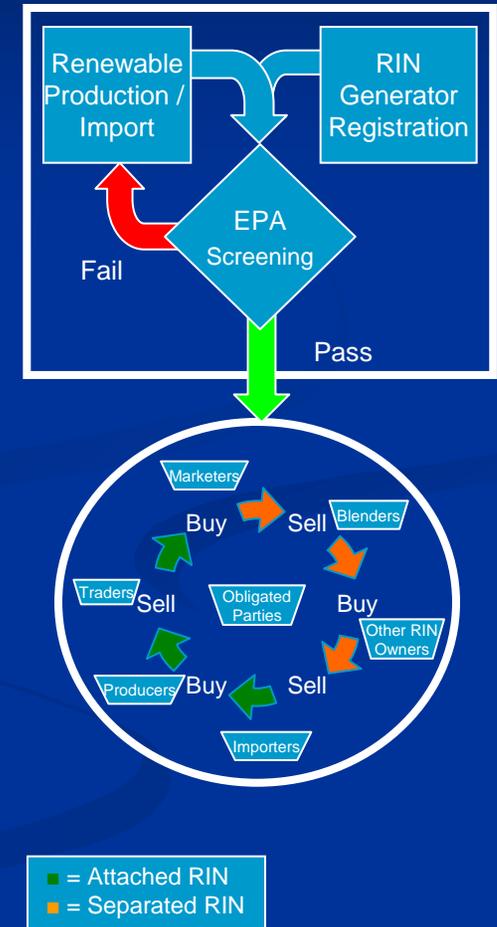
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Design Considerations

General

- Complete CDX solution
- No functionality in DCFUEL environment
- Automated system
- Driven by business rules
- Limited EPA involvement (management)
- Bi-directional data flow between the system and RIN Generators, Obligated Parties, and RIN Owners
- Regulated community interaction flexibility
 - Single user / terminal (individual report)
 - Machine to machine (batch process)
- We plan to address any potential data sensitivity issues at a later date



Interface and Exchange Network

- EPA plans to implement the EMTS offering a few different submission options
- A personal interface to allow transaction by transaction reporting (Individual to Machine capability)
- Network nodes that can be set up to communicate with the EMTS without an individual directly logging on to CDX (Machine to Machine capability)
 - The exchange network node technology will allow parties with servers and third party vendors to utilize their existing systems

Future Outreach

Tentative Outreach Schedule

February 25th: EMTS Initial Webinar

- Ask for general comments on the EMTS system
- If you belong to an industry group, please send all comments to your respective industry designee in order to have all comments addressed at once

March: EPA will begin dialogue with members of industry

- Explain the Exchange Network in further technical detail
- Address industry-specific comments

April: Follow-up Webinar on EMTS

- Addressing EMTS comments from the February 25th Webinar
- Outreach on the RFS proposal and implementation of future regulations

Questions & Comments

If you belong to an industry group, please send all comments to designee in your respective group in order to have all comments addressed at once

Otherwise please send comments to
FuelsProgramsReporting@epa.gov

On the subject of the e-mail, please include the title “**EMTS Comments**”, otherwise the comments/questions might not be addressed.

This email address is not for asking general RFS questions. Please do not send other inquiries to this e-mail address as they might not be seen or answered.

More Information on the Exchange Network

EPA's Office of Environmental Information (OEI) will now present technical information on the Exchange Network