Comparison of tokenization smart contract frameworks

	CMTAT Solidity code	ERC-1400	ERC-3643	Cast Framework
Version compared	CMTAT 3.0.0	UniversalToken (Consensys)	Tokeny's T-Rex 3fcf44d	Smart Coin (ERC-20 version) dd8bf5e
Company/Association behind	CMTA	Consensys	Tokeny, ERC3643 Association	Societe Generale FORGE
ERC-20	yes	yes	yes	
Transfer restriction (blacklist / address freeze)	yes	yes	yes	yes
On-chain identity management	(could be added with a RuleEngine)		yes	
Document management	YES (ERC-1643)	YES (ERC-1643)		
Whitelist management	YES (deployment version or RuleEngine)	yes	YES (on-chain id)	
Token contract pause	yes	yes	yes	yes
Conditional Transfer for specific addresses				YES (integrated into the token)
Conditional Transfer for all addresses	YES (through RuleEngine)		YES (through compliance contract)	
Configurable ERC-20 decimals	yes	Set at 18	yes	
Role-based access control	yes	yes	Partial (only one role Agent)	yes
Mint & burn to any address	yes	yes	yes	yes
Forced transfer function	yes	yes	yes	Partial (Only force burn is available)
Partially fungible token support		yes		
Contract version on-chain	yes	yes	yes	yes

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Deployable on Layer2 and other EVM blockchains	YES (requires PUSH0)	Partial (requires ERC-1820 Registry contract)	YES (requires PUSH0)	yes
License	MPL 2.0 (weak copyleft)	Apache 2.0 (permissive)	GPL 3.0 (strong copyleft)	Apache 2.0 (permissive)
Third-party security audit	yes	yes	yes	
MetaTx ("Gasless") support (ERC-2771)	yes			
Security identifiers	yes			
Explicit support of debt instruments	yes			
MetaTX ("Gasless") support (ERC-2771)	yes			
Customizable modular design	yes			
ERC-7802 Cross-chain transfer	yes			
ERC-20 custom errors	YES (uses OpenZeppelin v5)		(uses OpenZeppelin v4)	
Upgradability with ERC-7201	yes			
Snapshots/check points	YES (external contract)			

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