```solidity
// Item MetaData struct
struct ItemMetaData {
    address publisher;
    uint256 itemPrice;
    string itemLoc;
    string itemSize;
    string itemType;
    uint256 itemDuration;
    uint256 itemCreateTime;
    bytes32 itemHash;
    bytes32[] cosigners;      // witness
    bool isRegistered;
}

// Channel struct
struct Channel{
    address publisher;
    address consumer;
    uint256 deposit;
    uint256 duration;
    uint256 CreateTime;
    uint256 ItemSerial;
    bytes32 consumerSideitemHash;
    uint256 tempBalanceProof;
    bytes32 encryptionKey;
    uint256 state;
    bool isRegistered;

}
```