Role of IMS

IMS is an architecture developed by the 3GPP. Offers a simpler, cheaper, more efficient way to carry multimedia sessions instead of using circuit switched transmission.
Voice, Video, Gaming, Data can all be sent into the IMS network.
Lets any form of previous media connect to it.
Here are some various methods that are able to connect to the IMS network. These are commonly called "Access Methods"
PSTN Public Switched Telephone Network
EPS (Evolved Packet System) Commonly referred to as LTE, though is is a misnomer.
Fixed Line (DSL, Cable, Dial-up)
2G/3G Networks
Other IMS Networks

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PSTN Public Switched Telephone Network
E-UTRAN Evolved-Universal Terrestrial Radio Access Network Used by the EPS (LTE 4G) network for radio access.
Fixed Line (DSL, Cable, Dial-up)
Other IMS Networks

IMS Access Methods

So where does IMS fit in? It can be accessed from many networks. One example is from the LTE/E-UTRAN network. A user may use a cell phone which connects to an E-NodeB cell tower, which in turn goes through the EPS (evolved packet system). This is just a method of accessing the IMS core.
Another method maybe for a user to pick up a landline phone and dial someone, and the phone call would use SS7 to get the call to the IMS network.

IMS Access Methods (cont)

Both examples show that the IMS network has many "interfaces" to deal with accepting and outputting different types of media.
The entire chain of all accepted media, IMS, and SIP is what makes up technologies like VoLTE.

Other IMS Elements

Remember, since IMS was never designed to be strictly about phone calls, it makes sense that the S-CSCF has no real call functionality. It's main function is only session setup and control. Any type of basic calling services, are added later, if you plan on using the IMS network for calls. The server that is implemented to add call functionality is called the
TAS (Telephony Application Server)
In ALU terms it's known as the CTS (Converged Telephony Server). This type of splitting up of the service from the SIP services means you can have a wide range of types of application servers, not just telephony, as long as it uses SIP to set up the session.
Other examples of IMS elements are:
Voice Call Continuity Server
Presence Server
Billing and Charging
Basically the other IMS elements provide extended services to the user and usually are SIP speaking entities. So any SIP application function can be added to your IMS network as an application server. Doesn't have to be just voice. That being said, these application servers are not part of the IMS core.
BGCF Border Gateway Control Function
When the SIP S-CSCF receives and INVITE request, it needs to forward it somewhere. Either to a gateway, or to another local server. The BGCF provides a basic routing table to decide where to forward the next hop to.
MRF Media Resource Function Basically a mixer. Provides call conferencing functionality, and media for calling and called parties, such as ringback tones.

Other IMS Elements (cont)

PCRF Policy Control Resource Function
This function

Breaking Down Core IMS Elements

The IMS core is made up of SIP servers and other non-SIP servers.
P-CSCF Proxy Call Session Control Function First point of contact in IMS core. (But after the call has gone through it's access network) May provide TLS or IPSec security. Must figure out if the incoming caller's device is registered to an existing SIP S-CSCF, and which S-CSCF to send him to. The P-CSCF find out this information from another element called the HSS or Home Subscriber Server.
I-CSCF Interrogating Call Session Control Function You don't really want a whole mess of different Proxies each needing to use different diameter ports, to talk directly with your HSS. The I-CSCF consolidates all of the queries to one function, and forwards the requests from there. In doing so the I-CSCF finds out which S-CSCF to route the caller to. The I-CSCF then forwards the SIP request or response to the S-CSCF according to what the HSS told it.
HSS Home Subscriber Server Is a master database. It contains the subscription information like subscriber profiles, performs authentication and authorization of the user, and provides information about the subscriber's location and IP information. It only speaks Diameter protocol, not SIP. It is usually but not always contacted by an I-CSCF.
S-CSCF Serving Call Session Control Function It is a SIP server, but performs session control too. It provides routing services, typically using Electronic Numbering (ENUM). Also it handles SIP registrations, which allows it to bind the user's location and the SIP address. It's the 'core' of the IMS 'core' basically.

Media Connectivity to Other Networks

So the Control Plane of IMS uses SIP and the core SIP elements, like the P-CSCF, S-CSCF, I-CSCF and potentially the HSS, to control the flow, setup and signaling of the call.
When it comes to media (the actual data), there are many, many different protocols and interfaces that must be converted to and from to carry the information. This is where the Media Gateway comes in. For example, the PSTN can't talk SIP, so there has to be some sort of medium to bridge the two. But if you're receiving a session from another IMS/SIP network you don't need to translate.
So the requirements to reach and contact one type of network from another has been broken down into different 'functions'. Each of these gateways is usually linked to a controller that controls and monitors the underlying gateway.
Different types of access gateways:

ATCF & ATGW

Access Transfer Control Function
Access Transfer Gateway
Used to connect to the EPS access network. (4g devices over LTE)

IBCF

Interconnect Border Control Function
Interconnect Border Gateway
Used to bridge to other IMS networks